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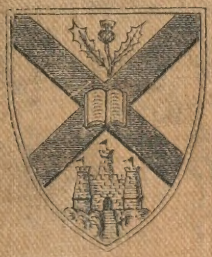

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In accordance with the Terms of the Trust Deed, the Competitors for these Prizes must be Students in the University of Edinburgh in this Winter Session (1895-96), who at the commencement thereof were not of more than three years' standing, from their first Matriculation in a University Curriculum. Each Essay submitted for Competition must have a Motto prefixed to it, and be accompanied with a SEPARATE sealed Envelope, bearing this Motto, and having enclosed the Name and Address of the Author; and these must be forwarded to the Secretary on or before the 1st of September next. The length of each Essay must not exceed 5,000 words and the Trustees find it necessary to make this restriction an ESSENTIAL condition in the Competition. The decision will be announced in the Newspapers in the beginning of November, but if it is judged that none of the Essays merit the Prizes offered, the right is reserved of declining to award them, and of offering them for future Competition. The successful Essays will be retained as the Property of the Trustees. The Sealed Envelope must not be put within an Essay, but sent enclosed to the Secretary apart.

DUNS, *11th March* 1896. A. J. B. PATERSON, M.A. *Secretary.*

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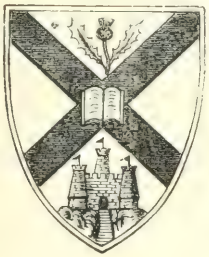

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PREFACE.

THE EDINBURGH UNIVERSITY CALENDAR *for the academic year* (1*st October to* 1*st October*), *published annually in June by authority of the Senatus Academicus, contains Synopses of the Courses of Lectures delivered by the Professors and Lecturers; the Class Prize Lists; the Regulations and Subjects of Examination for Degrees in Arts, Science, Divinity, Law, Medicine, and Music; the papers set for the Preliminary Examinations and for the Examinations for Degrees, &c.; the Regulations for the Schoolmaster's Diploma and for the Certificate of Literate in Arts; the Annual Graduation Lists; the Bursaries, Prizes, Scholarships, Fellowships, and other Endowments of the University; Benefactions*[1] *to the University; Bequests and Donations in* 1895-96; *a statement of the Annual Income and*

[1] A full list of the chief Benefactors, with the purposes of their benefactions, is given at pages 716-728.

Expenditure of the University; an abstract of the proceedings of the University Court from 1st May 1895 to 1st May 1896; and a list of the University Societies.

The CALENDAR *is Published by* JAMES THIN, *Edinburgh, and may be had through any Bookseller. (Price 3s.; by Post 3s. 6d.)*

The List of Members of the GENERAL COUNCIL, *with their addresses, is sold by the same Publisher. (Price 1s., by post 1s. 2d.)*

UNIVERSITY OF EDINBURGH,
July 1896.

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University Calendar.

1896.

Oct.	1.	Thur.	**ANNUS ACADEMICUS** begins. First day for payment of **MATRICULATION** fee. Practical Anatomy and Public Health Laboratory Courses begin. Annual Inspection of Library. All books to be returned before this date. Library closed for lending till 8th. Last day for Names of Candidates for Degrees in Arts and Science, for B.L. Preliminary on M.A. Standard, for L.A. Certificate, and for First Year Law Bursaries, to be given in, Certificates shown, and Fees paid.
,,	6.	Tu.	Examinations for M.A., L.A., and for B.L. Preliminary on M.A. Standard begin. See Time-Table, page 136.
,,	8.	Thur.	Examinations for Degrees in Science begin. See Time-Table, page 426.
,,	12.	Mon.	Meeting of University Court at 4 P.M.
,,	13.	Tues.	**CLASSES IN THE FACULTIES OF ARTS, SCIENCE, AND MEDICINE OPEN.** Last day for entering Names for Second and Third Year Bursaries in Law. Last day for Names of Candidates for B.D. to be given in, Certificates shown, and Fees paid.
,,	15.	Thur.	**CLASSES IN FACULTY OF LAW OPEN.**
,,	17.	Sat.	Meeting of Senatus Academicus at 2 P.M.; Standing Committees to be appointed.
,,	19.	Mon.	**CLASSES IN FACULTY OF MUSIC OPEN.** Last day for Names of Candidates for Examinations for Degrees in Law to be given in, Certificates shown, and Fees paid.
,,	20.	Tu.	Examinations for B.D. begin. See Time-Table, page 482.
,,	26.	Mon.	Examinations for Degrees in Law begin. See Time-Table, page 521.
,,	27.	Tues.	**CLASSES IN FACULTY OF DIVINITY OPEN.**
,,	30.	Fri.	Meeting of General Council at 3 o'clock.

1896.

Nov.	6.	Fri.	Examinations for Divinity Bursaries begin.
,,	13.	Fri.	Certificates for Bursaries in Arts granted by Deans.
,,	14.	Sat.	Fellowships, Scholarships, Bursaries, paid by Factor.
,,	16.	Mon.	Meeting of University Court at 4 P.M.
,,	28.	Sat.	Meeting of Senatus Academicus at 2 P.M.
,,	30.	Mon.	Registration of Members of General Council for Register of 1897 ends.
Dec.	12.	Sat.	Meeting of Senatus at 2 P.M. :— (1) Election of Managers for Royal Infirmary. (2) Report to Widows' Fund.
,,	14.	Mon.	Meeting of University Court at 4 P.M.
,,	18.	Fri.	Classes meet for last time before Christmas Vacation.
,,	21.	Mon.	Library, Reading Room, and University Offices open from 10 A.M. to 1 P.M. till 5th January. Closed on Saturdays. Reading Room, New Buildings, closed.
,,	25.	Fri.	**CHRISTMAS DAY.**

1897.

Jan.	1.	Fri.	HOLIDAY.
,,	5.	Tues.	Classes meet after Christmas Vacation.
,,	18.	Mon.	Meeting of University Court at 4 P.M. Appointment of Examiners.
,,	25.	Mon.	Meeting of University Court for hearing Registration Appeals (if any) at 4 P.M.
,,	30.	Sat.	Meeting of Senatus Academicus at 2 P.M. :— (1) Annual Report on University Library to be given in. (2) Names for Honorary Degrees to be proposed. (3) Arrangements for Winter and Summer Sessions, 1897-98.
Feb.	8.	Mon.	Holiday in Faculty of Arts.
,,	15.	Mon.	Meeting of University Court at 4 P.M.
,,	27.	Sat.	Meeting of Senatus Academicus at 2 P.M. :— (1) Report on Honorary Degrees in Divinity and Law. (2) Resolution to Elect Member of General Assembly.
March	1.	Mon.	Last day for Names for Preliminary Examination to be given in, and Fees paid.
,,	5.	Fri.	Last day for Names of Candidates for Degrees in Arts and Law, for Schoolmaster's Diploma, for Literate in Arts, and for B.L. Preliminary on M.A. Standard to be given in, and Fees paid.
,,	9.	Tues.	Last day for Names for First Professional Examination in Medicine, and for Examinations for Degrees in Science to be given in, and Fees paid.

1897.

Mar. 10. Wed. Last day for Names for Examinations for Degree in Music to be given in, Certificates shown, and Fees paid.

,, 15. Mon. Meeting of University Court.
Last day for Names of Candidates for Scholarships in Arts and Science to be intimated.
Last day for Names for Second Professional Examination in Medicine to be given in, and Fees paid.
Examinations for M.A., for L.A., and for Degrees in Law begin. See Time-Tables, pages 136 and 521.

,, 19. Fri. **CLASSES IN FACULTIES OF DIVINITY, LAW, AND MEDICINE CLOSE.**
Certificates for First Professional Examination to be examined.

,, 20. Sat. Practical Chemistry Examinations for Degrees in Arts, Science, and Medicine begin.

,, 22. Mon. First Professional examination in Medicine, B.Sc. Examinations, and Science Subjects for M.A. begin. See Time-Tables, pages 136, 426, 620, 636.

,, 23. Tues. Last day for Names to be given in, Certificates shown, and Fees paid for B.D. Examinations.

,, 24. Wed. First Professional and Arts and Science Oral Examinations begin.
Certificates for Second Professional Examination to be examined.

,, 25. Thurs. Examinations for Degrees in Music begin. See Time-Table, page 704.
Last day for Names for Third Professional Examination in Medicine (New Regulations) to be given in, and Fees paid.

,, 26. Fri. **CLASSES IN THE FACULTIES OF ARTS AND SCIENCE CLOSE.**
Preliminary Examinations begin. See Time-Table, page 134.
Examinations for M.A. with Honours and for Scholarships begin. See Time-Table, page 137.
Second Professional Examinations begin. See Time-Tables, pages 621, 636.

,, 27. Sat. Meeting of Senatus Academicus at 2 P.M. :—
(1) Member of Assembly to be elected.
(2) Acceptances of Honorary Degrees.
Second Professional Oral Examinations begin.

1897.

Mar.	27.	Sat.	Certificates for M.A. Examinations in April to be shown before 1 P.M.
,,	30.	Tues.	B.D. Examinations begin. See Time-Table, page 482. Certificates for Third Professional Examination to be examined.
Apri	2.	Fri.	Third Professional Examinations (New Regulations) begin. See Time-Table, page 621.
,,	3.	Sat.	Third Professional Oral Examinations begin.
,,	10.	Sat.	**GRADUATION CEREMONIAL IN DIVINITY, LAW, ARTS, AND SCIENCE, AT 10 A.M. COMMEMORATION SERVICE IN ST GILES'S AT 12.** Meeting of Senatus at 9.30 A.M.
,,	12.	Mon.	Meeting of University Court at 4 P.M. Senatus Office open from 10 to 1 till 1st May. Closed on Saturdays. Meeting of University General Council at 3 P.M.
,,	13.	Tues.	Names of Candidates for Final Exam. in Medicine to be given in, Certificates shown, and Fees paid.
,,	14.	Wed.	Certificates for Final Exam. to be examined.
,,	15.	Thur.	
,,	16.	Fri.	**GOOD FRIDAY.** HOLIDAY.
,,	19.	Mon.	Edinburgh holiday.
,,	20.	Tues.	University Library and Reading Room, in New Buildings, open from 10 A.M. to 1 P.M. till 26th April. Closed on Saturdays.
,,	30.	Fri.	Last day for giving in Theses and paying Fees for M.D., D.Sc., D.Litt., and D.Phil.
May	4.	Tues.	**SUMMER SESSION OPENS.** Clinical Medicine Exams. begin.
,,	12.	Wed.	**LAW CLASSES OPEN.**
,,	17.	Mon.	Meeting of University Court at 4 P.M.
,,	18.	Tues.	Fellowships, Scholarships, Bursaries, paid by Factor.
,,	20.	Thur.	HOLIDAY. General Assembly meets.
,,	28.	Fri.	Meeting of Senatus Academicus at 3 P.M.
June	14.	Mon.	Meeting of University Court at 4 P.M.
,,	21.	Mon.	Final Prof. Written Exam. in Med. begins. See Time-Table, page 622.
,,	23.	Wed.	Final Prof. Oral Exams. begin. Clinical Surgery Exam. begins.
,,	25.	Fri.	Meeting of Senatus Academicus at 3 P.M.
July	7.	Wed.	Last day for Names to be entered and Fees paid for Candidates for Clinical Examinations only for M.D.

1897.

July	9.	Fri.	Last day for Names of Candidates for Examinations for Degrees in Arts and Science, and for First Professional Examination in Medicine to be given in, and Fees paid.
,,	12.	Mon.	Meeting of University Court at 4 P.M.
,,	15.	Thur.	Last day for Names of Candidates for Second Professional Examination to be given in, and Fees paid.
,,	16.	Fri.	SUMMER SESSION ENDS. Certificates for First Professional and Arts and Science Examinations to be examined.
,,	17.	Sat.	Practical Chemistry Examination for Degrees in Arts, Science, and Medicine begins.
,,	19.	Mon.	Examinations for Degrees in Arts (Dept. of Science), for Degrees in Science, and First Professional Examination in Medicine begin. See Time-Tables, pages 138, 426, 620, 636.
,,	20.	Tu.	Names of Candidates for Third Professional Examination in Medicine (New Regulations) to be given in, and Fees paid.
,,	21.	Wed.	Oral Examinations for Degrees in Arts, Science, First Professional in Medicine and Clinical Medicine Examination for M.D. begin. Second Professional Examination Certificates to be examined.
,,	23.	Fri.	Second Professional Examination in Medicine begins. See Time-Tables, pages 621, 636.
,,	24.	Sat.	Second Professional Examination Oral Examination begins.
,,	26.	Mon.	Third Professional Examination Certificates to be examined.
,,	27.	Tu.	Third Professional Examination begins. See Time-Table, pages 621 and 637.
,,	28.	Wed.	Third Professional Oral Examination begins.
,,	30.	Fri.	Meeting of Senatus Academicus at 3 P.M.: Candidates for Degrees in Arts to be approved.
Aug.	2.	Mon.	**GRADUATION CEREMONIAL IN LAW, MEDICINE, AND SCIENCE AT 10 a.m.** Meeting of Senatus at 9.30 A.M.
			Library open from 10 A.M. to 1 P.M. till Tuesday, 1st September. Closed on Saturdays. Reading Room, New Buildings, closed during same period.
			University Offices open from 10 to 1 till 1st October. Closed on Saturdays.
Sept.	1.	Wed.	Reading Room in University New Buildings open from 10 to 1 till 1st October. Closed on Saturdays.

1897.

Sept.	17.	Fri.	Last day for Names of Candidates for Preliminary Examinations to be given in and Fees paid. Last day for entering for University Bursaries in the Faculties of Arts and Science.
,,	20.	Mon.	Edinburgh Holiday.
,,	24.	Fri.	Preliminary and Bursary Examinations may begin. Time-Tables will be given in CALENDAR for 1897-8, and in the Regulations issued separately.

Calendar for the Academic Year 1897-98.

OCTOBER 1897.						
S		3	10	17	24	31
M		4	11	18	25	
Tu		5	12	19	26	
W		6	13	20	27	
Th		7	14	21	28	
Fr	1	8	15	22	29	
Sa	2	9	16	23	30	

NOVEMBER 1897.						
S		7	14	21	28	
M	1	8	15	22	29	
Tu	2	9	16	23	30	
W	3	10	17	24		
Th	4	11	18	25		
Fr	5	12	19	26		
Sa	6	13	20	27		

DECEMBER 1897.						
S		5	12	19	26	
M		6	13	20	27	
Tu		7	14	21	28	
W	1	8	15	22	29	
Th	2	9	16	23	30	
Fr	3	10	17	24	31	
Sa	4	11	18	25[1]		

JANUARY 1898.						
S		2	9	16	23	30
M		3	10	17	24	31
Tu		4	11	18	25	
W		5	12	19	26	
Th		6	13	20	27	
Fr		7	14	21	28	
Sa	1	8	15	22	29	

FEBRUARY 1898.						
S		6	13	20	27	
M		7	14[2]	21	28	
Tu	1	8	15	22		
W	2	9	16	23		
Th	3	10	17	24		
Fr	4	11	18	25		
Sa	5	12	19	26		

MARCH 1898.						
S		6	13	20	27	
M		7	14	21	28	
Tu	1	8	15	22	29	
W	2	9	16	23	30	
Th	3	10	17	24	31	
Fr	4	11	18	25		
Sa	5	12	19	26		

APRIL 1898.						
S		3	10	17	24	
M		4	11	18[4]	25	
Tu		5	12	19	26	
W		6	13	20	27	
Th		7	14	21	28	
Fr	1	8[3]	15	22	29	
Sa	2	9	16	23	30	

MAY 1898.						
S	1	8	15	22	29	
M	2	9	16	23	30	
Tu	3	10	17	24	31	
W	4	11	18	25		
Th	5	12	19	26		
Fr	6	13	20	27		
Sa	7	14	21	28		

JUNE 1898.						
S		5	12	19	26	
M		6	13	20	27	
Tu		7	14	21	28	
W	1	8	15	22	29	
Th	2	9	16	23	30	
Fr	3	10	17	24		
Sa	4	11	18	25		

JULY 1898.						
S		3	10	17	24	31
M		4	11	18	25	
Tu		5	12	19	26	
W		6	13	20	27	
Th		7	14	21	28	
Fr	1	8	15	22	29	
Sa	2	9	16	23	30	

AUGUST 1898.						
S		7	14	21	28	
M	1	8	15	22	29	
Tu	2	9	16	23	30	
W	3	10	17	24	31	
Th	4	11	18	25		
Fr	5	12	19	26		
Sa	6	13	20	27		

SEPTEMBER 1898.						
S		4	11	18	25	
M		5	12	19	26	
Tu		6	13	20	27	
W		7	14	21	28	
Th	1	8	15	22	29	
Fr	2	9	16	23	30	
Sa	3	10	17	24		

[1] Christmas.

[2] Holiday in Faculty of Arts.

[3] Good Friday.

[4] Edinburgh Holiday.

ADDRESSES OF THE PRINCIPAL, PROFESSORS, EMERITI AND RESIGNED PROFESSORS, AND UNIVERSITY LECTURERS.

I.—Principal and Professors.

Principal Sir William Muir, Dean Park House.
Professor Annandale, 34 Charlotte Square.
„ Armstrong, The University.
„ Baldwin Brown, 20 Lansdowne Crescent.
„ Bayley Balfour, Inverleith House.
„ Crum Brown, 8 Belgrave Crescent.
„ Butcher, 27 Palmerston Place.
„ Calderwood, Craigrowan, 7 Napier Road, Merchiston.
„ Charteris, Cameron House, Dalkeith Road.
„ Chiene, 26 Charlotte Square.
„ Chrystal, 5 Belgrave Crescent.
„ Copeland, The Observatory, Blackford Hill.
„ Eggeling, 15 Hatton Place, Grange.
„ Ewart, Penicuik.
„ Flint, Johnstone Lodge, Craigmillar Park.
„ Fraser, 13 Drumsheugh Gardens.
„ Geikie, 31 Merchiston Avenue.
„ Sir Ludovic Grant, Bart., 29 India Street.
„ Greenfield, 7 Heriot Row.
„ Hardie, 4 Chalmers Crescent.
„ Kennedy, 9 Fountainhall Road.
„ Kirkpatrick, 5 Murrayfield.
„ Laurie, Nairne Lodge, Duddingston.
„ Mackinnon, 9 Merchiston Place.
„ Mackintosh, 2 Drummond Place.
„ Sir Douglas Maclagan, 28 Heriot Row.
„ Nicholson, Eden Lodge, Newbattle Terrace.
„ Niecks, 22 Dick Place.
„ Prothero, 2 Eton Terrace.
„ Rankine, 23 Ainslie Place.
„ Rutherford, 14 Douglas Crescent.
„ Saintsbury, Murrayfield House.

Professor Seth, 16 Church Hill.
„ Simpson, 52 Queen Street.
„ Sir Thomas Grainger Stewart, 19 Charlotte Square.
„ Tait, 38 George Square.
„ Taylor, 6 Greenhill Park.
„ Sir Wm. Turner, 6 Eton Terrace.
„ Wallace, 5 Mansfield Place.
„ Wood, 16 Buckingham Terrace.

II.—PROFESSORS EMERITI.

George James Allman, LL.D., M.D., formerly Professor of Natural History; Ardmore, Parkstone, Dorset.

Alexander Campbell Fraser, D.C.L., LL.D., formerly Professor of Logic and Metaphysics; Gorton, Hawthornden, Midlothian.

Norman Macpherson, LL.D., formerly Professor of Scots Law; 6 Buckingham Terrace.

David Masson, LL.D., formerly Professor of Rhetoric and English Literature, Gowanlea, Juniper Green, Midlothian.

Sir Herbert Stanley Oakeley, D.C.L., LL.D., Mus. D., formerly Professor of Music; 16 Suffolk Street, London, S.W.

Charles Piazzi Smyth, LL.D., formerly Professor of Practical Astronomy; Clova, Ripon.

III.—PROFESSORS RESIGNED.

Theodor Aufrecht, M.A., Ph.D., formerly Professor of Sanskrit; The University, Bonn.

Sir Archibald Geikie, LL.D., formerly Professor of Geology; Museum of Geology, Jermyn Street, London.

Sir Joseph Lister, Bart., LL.D., M.D., formerly Professor of Clinical Surgery; 12 Park Crescent, Portland Place, London, W.

Æneas James George Mackay, LL.D., Sheriff of Fife, Advocate, formerly Professor of History; 7 Albyn Place, Edinburgh.

Right Hon. Lord Playfair, LL.D., formerly Professor of Chemistry; 68 Onslow Gardens, South Kensington, London.

Robert Wallace, D.D., M.P., formerly Professor of Church History; 50 Finborough Road, London, S.W.

IV.—University Lecturers.

Andrew P. Aitken, D.Sc., 57 Great King Street.
Colonel F. Bailey, R.E., 7 Drummond Place.
J. Beard, D.Sc., Ph.D., 93 Comely Bank Avenue.
George A. Berry, M.B., C.M., 31 Drumsheugh Gardens.
G. W. Burnet, M.A., B.L., 46 Northumberland Street.
Edmond W. Carlier, M.D., 39 Morningside Drive.
James Carmichael, M.D., 22 Northumberland Street.
Thomas S. Clouston, M.D., Tipperlinn House, Morningside Place.
John James Cook, M.A., LL.B., 42 Northumberland Street.
Leonard Dobbin, Ph.D., 7 Cobden Road.
Charles Douglas, M.A., D.Sc., 12 Bruntsfield Crescent.
John Smith Flett, M.A., B.Sc., M.B., C.M.
William Fream, LL.D., B.Sc., The Vinery, Downton, Salisbury.
Robert P. Hardie, M.A., 4 Chalmers Crescent.
David Hepburn, M.D., 5 Marchhall Crescent.
Francis Robert Jamieson, M.A., 9 Duncan Street.
Walter Hume Kerr, M.A., B.Sc., Viewfield, Juniper Green.
Cargill G. Knott, M.A., D.Sc., 42 Upper Gray Street.
Hugh Macmillan, D.D., LL.D. (Gunning Lecturer).
Hugh Marshall, D.Sc., 131 Warrender Park Road.
Robert Muir, M.D., 20 Hartington Place.
William Peddie, D.Sc., 2 Cameron Park.
John Playfair, M.D., 5 Melville Crescent.
Charles Sarolea, Ph.D., D.Litt., 5 Blantyre Terrace.
Otto Schlapp, 146 Morningside Road.
William Cameron Sillar, M.B., B.Sc., 46 George Square.
G. Gregory Smith, M.A., University.
William G. Smith, B.Sc., Ph.D., Royal Botanic Gardens.
Professor Tiele, Leyden (Gifford Lecturer in Natural Theology).
Alexander Douglas Thomson, M.A., 86 Marchmont Road.
Charles Tweedie, M.A., B.Sc., University.

University Officers.

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Chancellor.

Date of Institution.		Appointed
1859.	RIGHT HON. ARTHUR JAMES BALFOUR, M.P., D.C.L., LL.D.	1891

Vice-Chancellor.

1859.	SIR WILLIAM MUIR, K.C.S.I., D.C.L., LL.D., Ph.D.	1885

Rector.

1859.	THE RIGHT HON. J. P. B. ROBERTSON, LL.D., Lord Justice-General	1893

Principal.

1582.	SIR WILLIAM MUIR, K.C.S.I., D.C.L., LL.D., Ph.D.	1885

Representative in Parliament.

1868.	SIR WILLIAM OVEREND PRIESTLEY, K.B., M.D., LL.D.	1896

—o—

University Court.

President—THE RECTOR, *Ex officio.*

THE PRINCIPAL	*Ex officio.*			
RT. HON. ANDREW M'DONALD, Lord Provost of Edinburgh	*Ex officio.*			
ÆNEAS J. G. MACKAY, LL.D., Advocate	Assessor, nominated by Chancellor			1891
THE HON. LORD STORMONTH DARLING, LL.D.	Do.	nominated by Rector		1887
JAMES COLSTON	Do.	elected by Town Council		1886
PATRICK HERON WATSON, M.D., LL.D.	Do.	elected by General Council		1887
J. HOPE FINLAY, W.S.	Do.	do.	do.	1893
A. TAYLOR INNES, M.A., Advocate.	Do.	do.	do.	1893
JOSEPH BELL, M.D.	Do.	do.	do.	1895
SIR WILLIAM TURNER, M.B., D.C.L., LL.D., Professor of Anatomy	Do.	elected by Senatus		1889
ALEXANDER CRUM BROWN, M.D., D.Sc., Professor of Chemistry	Do.	do.	do.	1889
SAMUEL HENRY BUTCHER, LL.D., Litt.D., Professor of Greek	Do.	do.	do.	1891
HENRY CALDERWOOD, LL.D., Professor of Moral Philosophy	Do.	do.	do.	1892

Secretary—PROFESSOR TAYLOR, D.D.
Factor and Law Agent—HENRY COOK, W.S.
Auditor—THOMAS GOLDIE DICKSON, C.A.
Clerk—THOMAS GILBERT.
Assistant Clerk—JAMES DOWIE.
Secretary's Clerk—GEORGE CAMPBELL.

Curators of Patronage.

		Appointed.
PRINCIPAL SIR WILLIAM MUIR	Elected by University Court	1887
RIGHT HON. J. P. B. ROBERTSON, LL.D., Lord Justice-General	Elected by do.	1896
PATRICK HERON WATSON, M.D., LL.D	Elected by do.	1891
RT. HON. ANDREW M'DONALD, Lord Provost	Elected by Town Council	1895
SIR THOS. CLARK, Bart.	Elected by do.	1886
SIR JAS. ALEXANDER RUSSELL, LL.D.	Elected by do.	1891
GEO. AULDJO JAMIESON, C.A.....	Elected by do.	1892

Secretary—R. HERBERT JOHNSTON, W.S., 66 Frederick Street.

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Senatus Academicus.

President—THE PRINCIPAL. **Secretary**—PROFESSOR KIRKPATRICK.

FACULTY OF ARTS.

Dean—Professor CHRYSTAL, LL.D.

Date of Institution.	Chairs.	Professors.	Appointed.	Patrons.
1760	**Rhetoric and English Literature**	GEO. SAINTSBURY, M.A.	1895	Crown.
1583	**Humanity**	WILLIAM ROSS HARDIE, M.A.	1895	Lds. of Ses., Cur., Fac. of Adv., and W.S. Soc.[1]
1583	**Greek**	SAMUEL HENRY BUTCHER, LL.D., Litt.D.	1882	Curators.
1642	**Hebrew and Semitic Languages**	ARCH. ROBT. STIRLING KENNEDY, B.D., D.D.	1895	Curators.
1862	**Sanskrit and Comparative Philology**[2]	JULIUS EGGELING, Ph.D.	1875	Crown.
1882	**Celtic Languages, Literature, History, and Antiquities**[3]	DON. MACKINNON, M.A.	1882	Curators.
1583	**Mathematics**	GEO. CHRYSTAL, LL.D...	1879	Curators.
1685	**Natural Philosophy**...	PETER GUTHRIE TAIT, M.A., D.Sc.	1860	Curators.
1803	**Logic & Metaphysics**.	ANDREW SETH, LL.D..	1891	Curators.
1685	**Moral Philosophy**.....	HY. CALDERWOOD, LL.D.	1868	Curators.
1719	**History**	JOHN KIRKPATRICK, LL.B., LL.D.	1881	Fac. of Adv., & Cur.
1893	**History**	GEORGE WALTER PROTHERO, M.A., D.Litt.	1894	University Court.
1671	**Commercial & Political Economy & Mercantile Law**[4]	JOSEPH SHIELD NICHOLSON, M.A., D.Sc.	1880	Cur., & Merch. Co.

[1] The Judges of the Court of Session nominate two Delegates, the Curators two, the Faculty of Advocates one, and the Society of Writers to the Signet one. These Delegates appoint the Professor, who receives his Commission from the Curators.

[2] This Chair was originally endowed by John Muir, LL.D. (Edin.), D.C.L. (Oxon.), late of the Bengal Civil Service, and by a Parliamentary vote.

[3] Originally endowed with a sum of £14,000, raised by public subscription.

[4] This Chair was endowed in 1871 by the Merchant Company of Edinburgh, and other Governors of George Watson's and Daniel Stewart's Hospitals.

Date of Institution.	Chairs.	Professors.	Appointed.	Patrons.
1879	**Fine Art**[1] (Watson Gordon Chair).....	GERARD BALDWIN BROWN, M.A.	1880	Univ. Ct., Pres. R. Scott. Acad.
1876	**Theory, History, and Practice of Education**[2]	SIMON SOMERVILLE LAURIE, LL.D.	1876	Bell Trustees.

FACULTY OF SCIENCE.

Dean—Professor GEIKIE, D.C.L., LL.D.

1583	**Mathematics**	GEORGE CHRYSTAL, M.A., LL.D.	1879	Curators.
1583	**Natural Philosophy**..	PETER GUTHRIE TAIT, M.A., D.Sc.	1860	Curators.
1786	**Astronomy**	RALPH COPELAND, Ph.D.	1889	Crown.
1713	**Chemistry**	ALEX. CRUM BROWN, M.D., D.Sc.	1869	Curators.
1767	**Natural History**.....	JAMES COSSAR EWART, M.D.	1882	Crown.
1676	**Botany**.....	ISAAC BAYLEY BALFOUR, M.D., D.Sc.	1888	Curators.
1705	**Anatomy**	Sir WILLIAM TURNER, M.B., D.C.L., LL.D.	1867	Curators.
1685	**Physiology**.....	WILLIAM RUTHERFORD, M.D.	1874	Curators.
1871	**Geology**[3].....	JAMES GEIKIE, D.C.L., LL.D.	1882	Crown.
1868	**Engineering**[4]....	GEO. FREDERICK ARMSTRONG, M.A., C.E.	1885	Crown.
1790	**Agriculture & Rural Economy**[5]	ROBERT WALLACE.....	1885	Lds.of Sess., Cur. & Univ. Ct.

FACULTY OF DIVINITY.

Dean—Professor TAYLOR, D.D.

1583	**Divinity**.....	ROBERT FLINT, D.D.....	1876	Curators.
1846	**Biblical Criticism & Biblical Antiquities**	ARCHIBALD HAMILTON CHARTERIS, D.D.	1868	Crown.
1694	**Ecclesiastical History**	MALCOLM CAMPBELL TAYLOR, D.D.	1877	Crown.
1642	**Hebrew and Semitic Languages**	ARCHD. ROBT. STIRLING KENNEDY, B.D., D.D.	1895	Curators.

FACULTY OF LAW.

Dean—Professor Sir LUDOVIC GRANT, Bart., B.A.

1707	**Public Law**.....	Sir LUDOVIC GRANT, Bart., B.A.	1890	Crown.
1710	**Civil Law**.....	JAS. MACKINTOSH, B.A.	1893	Fac. of Adv., and Cur.[6]
1719	**History (Constitutional, etc.)**	JOHN KIRKPATRICK, LL.B., LL.D.	1881	Do.[6]
1722	**Scots Law**.....	JOHN RANKINE, LL.D.	1888	Do.[6]

[1] This Chair was endowed by Mr H. G. and Miss Frances Watson.

[2] This Chair was originally endowed by the Trustees of the late Dr A. Bell, with a sum of £6000, to which a further sum of £4500 out of the Bell Fund was added by the Educational Endowments Commission in 1887.

[3] This Chair was originally endowed in 1871 by a sum of £6000 mortified by Sir Roderick Impey Murchison, Bart., and by an annual vote by Parliament.

[4] This Chair was endowed in 1868 by Sir David Baxter, and by an annual vote of Parliament.

[5] The Professor is elected by nine Delegates, three chosen by the Judges of the Court of Session, three by the Curators, and three by the University Court.

[6] For each of these Chairs the Faculty of Advocates send to the Curators a leet of two, of whom the Curators must choose one.

Date of Institution.	Chairs.	Professors.	Appointed.	Patrons.
1807	**Forensic Medicine**	Sir Douglas Maclagan, M.D., LL.D.	1862	Crown.
1825	**Conveyancing**[1]	John Philp Wood, W.S.	1891	Cur., Dep.-Kpr. and W.S. Soc.[2]
1871	**Commercial and Political Economy and Mercantile Law**	Joseph Shield Nicholson, M.A., D.Sc.	1880	Cur., & Merch. Co.

FACULTY OF MEDICINE.

Dean—Professor Fraser, M.D., LL.D., F.R.S.,

1713	**Chemistry**	Alex. Crum Brown, M.D.	1869	Curators.
1767	**Natural History**	James Cossar Ewart, M.D.	1882	Crown.
1676	**Botany**	Bayley Balfour, M.D.	1888	Curators.
1705	**Anatomy**	Sir Wm. Turner, M.B.	1867	Curators.
1685	**Physiology**	Wm. Rutherford, M.D.	1874	Curators.
1831	**Pathology**	William Smith Greenfield, M.D.	1881	Curators.
1768	**Materia Medica**	Thomas Richard Fraser, M.D.	1877	Curators.
1685	**Medicine**	Sir Thomas Grainger Stewart, M.D.	1876	Curators.
1831	**Surgery**	John Chiene, M.D.	1882	Curators.
1726	**Midwifery**	Alex. Russell Simpson, M.D.	1870	Curators.
1807	**Forensic Medicine**	Sir Douglas Maclagan, M.D.	1862	Crown.
1803	**Clinical Surgery**	Thos. Annandale, M.D.	1877	Crown.
1741	**Clinical Medicine**	Sir Thomas Grainger Stewart, M.D.; Thomas Richard Fraser, M.D.; William Smith Greenfield, M.D. Diseases of Women—Alexander Russell Simpson, M.D.		

FACULTY OF MUSIC.

Dean—Professor Niecks. The Principal, *ex officio.*

Professor Kirkpatrick, appointed by the Senatus.

1891	**Reid Chair of Music**	Frederick Niecks.	1891	University Court.

UNIVERSITY LECTURERS.

	Subjects.	Lecturers.		
1892	**English**	G. Gregory Smith, M.A.	1892	University Court.
1892	**Latin**	Francis Robert Jamieson, M.A.	1892	Do.
1892	**Greek**	A. Douglas Thomson, M.A.	1892	Do.
1892	**Mathematics**	Charles Tweedie, M.A., B.Sc.	1892	Do.
1892	**Natural Philosophy**	William Peddie, D.Sc.	1892	Do.
1892	**Applied Mathematics**	Cargill G. Knott, M.A., D.Sc.	1892	Do.

[1] Endowed by the Society of Writers to the Signet.

[2] The Election is by—(1) Two Delegates from the Curators; (2) Two from the Society of Writers to the Signet; and (3) The Deputy-Keeper of the Signet.

Date of Institution.	Subjects.	Lecturers.	Appointed.	Patrons.
1892	**Logic & Metaphysics**	Robert P. Hardie, M.A.	1892	University Court.
1892	**Moral Philosophy**.....	Charles Douglas, M.A., D.Sc.	1892	Do.
1894	**French Lang., Lit., and Romance Philology**	Charles Sarolea, Ph.D., D.Litt.	1894	Do.
1894	**German Lang., Lit., and Teutonic Philology**	Otto Schlapp.	1894	Do.
1894	**Chemical Theory**.....	Leonard Dobbin, Ph.D.	1894	Do.
1894	**Plant Physiology**.....	W. G. Smith, B.Sc., Ph.D.	1894	Do.
1894	**Mineralogy and Crystallography**.....	Hugh Marshall, D.Sc.	1894	Do.
1894	**Petrology**	John Smith Flett, M.A., B.Sc., M.B., C.M.	1894	Do.
1894	**Advanced Physiology**	Edmond W. Carlier, M.D., B.Sc.	1894	Do.
1895	**Geometrical and Mechanical Drawing**	Walter Hume Kerr, M.A., B.Sc.	1895	Do.
1894	**Agricultural Chemistry**.....	A. P. Aitken, D.Sc.	1894	Do.
1889	**Forestry**.....	Colonel F. Bailey, R.E.	1892	Do.
1890	**Agricultural Entomology**	William Fream, LL.D., B.Sc.	1891	Do.
1887	**Gifford Lecturer on Natural Theology**	Professor C. B. Tiele of Leyden	1894	Do.
1889	**Gunning Lecturer**.....	Hugh Macmillan, D.D., LL.D.	1894	Do.
1894	**International Private Law**.....	G. W. Burnet, M.A., B.L.	1894	Do.
1884	**Procedure & Evidence**	John James Cook, M.A., LL.B.	1895	Do.
1879	**Mental Diseases**.....	Thos. S. Clouston, M.D.	1879	Do.
1883	**Diseases of the Eye**....	George A. Berry, M.B., C.M.	1896	Do.
1885	**Clinical Instruction on Diseases of Children**	Jas. Carmichael, M.D. John Playfair, M.D.	1885 1889	Do. Do
1885	**Embryology and Vertebrate Zoology**	John Beard, D.Sc.	1894	Do.
1894	**Regional Anatomy**....	David Hepburn, M.D.	1896	Do.
1894	**Experimental Pharmacology**.....	William C. Sillar, M.B., B.Sc.	1894	Do.
1894	**Pathological Bacteriology**.....	Robert Muir, M.D.	1894	Do.

UNIVERSITY ASSISTANTS.

IN THE FACULTY OF ARTS.

Rhetoric and Eng. Liter.....	G. Gregory Smith, M.A., Edin. and Oxon.
Humanity.....	Francis R. Jamieson, M.A.
Greek.....	A. Douglas Thomson, M.A.
Hebrew and Semitic Languages	David Miller Kay, M.A., B.Sc., B.D.
Mathematics.....	Charles Tweedie, M.A., B.Sc.
Natural Philosophy.....	William Peddie, D.Sc.
Do. (Mechanical)	Thomas Lindsay.
Logic and Metaphysics.....	R. P. Hardie, M.A. Edin., B.A. Oxon.
Moral Philosophy.....	Charles Douglas, M.A., D.Sc.

IN THE FACULTY OF SCIENCE.

Subjects.	Lecturers.
Geology	JOHN S. FLETT, M.A., B.Sc., M.B., C.M.
Engineering	W. H. KERR, M.A., B.Sc.
Do., Demonstrator	W. G. RENNIE, B.Sc.

IN THE FACULTY OF DIVINITY.

Divinity	Rev. ALEXANDER HORN, B.D.
Hebrew and Semitic Languages	Rev. DAVID M. KAY, M.A., B.Sc., B.D.

IN THE FACULTY OF LAW.

Civil Law	J. M. IRVINE, M.A., B.Sc., LL.B.
Scots Law	JAMES ADAMSON, M.A.
Conveyancing	A. B. FLEMING.

IN THE FACULTY OF MEDICINE.

Chemistry	LEONARD DOBBIN, Ph.D.; HUGH MARSHALL, D.Sc.; WILLIAM WHITE TAYLOR, M.A., B.Sc.
Zoology	J. BEARD, D.Sc.; GREGG WILSON, M.A. B.Sc., Ph.D.
Botany	JAS. ADAM TERRAS, B.Sc.; J. H. BURRAGE, B.A.
Anatomy	DAVID HEPBURN, M.D.; J. B. YEOMAN, M.B., C.M.; E. H. FRASER, M.B.; and R. CRAIG DUN, M.B.
Physiology	E. W. CARLIER, M.D., B.Sc.; ROBERT HUTCHISON, M.D., C.M.; J. PURVES STEWART, M.B., C.M.
Pathology	ROBT. MUIR, M.A., M.D.; D. A. WELSH, M.B., B.Sc. *Laboratory Assistant*—RICHARD MUIR.
Materia Medica	WM. C. SILLAR, M.B., C.M., B.Sc., and
Medicine	ROBERT A. FLEMING, M.A., M.D., C.M.
Clinical Medicine Tutors	ROBERT A. FLEMING, M.A., M.B., C.M.; HARRY RAINY, M.B., C.M.; and D. A. WELSH, M.D., B.Sc.
Surgery	HAROLD J. STILES, M.B., C.M.; E. G. FORTUNE, M.B., C.M.
Midwifery	J. CLARENCE WEBSTER, B.A., M.D.
Forensic Medicine	CHARLES HUNTER STEWART, M.B., C.M., D.Sc.; J. BUCHANAN YOUNG, M.B., C.M., D.Sc.
Clinical Surgery Tutor	JOHN WHEELER DOWDEN, M.B., C.M.

EXAMINERS.

FOR PRELIMINARY EXAMINATION.

The Professors of or Lecturers on the several subjects, and the following additional Examiners:—

Subjects.	Examiners.	Appointed.	Patrons.
English	STEWART ALAN ROBERTSON, M.A.	1895	University Court.
Latin } **Greek**	JAMES CRUICKSHANK SMITH, M.A. Edin., B.A. Oxon.	1894	Do.
Mathematics	DAVID BEVERIDGE MAIR, M.A. Edin., B.A. Cantab.	1893	Do.
French } **German**	FREDERICK P. WALTON, M.A., LL.B.	1895	Do.
Dynamics	DAVID BEVERIDGE MAIR, M.A. Edin., B.A. Cantab.	1893	Do.

FOR DEGREES, &c.

I.—IN THE FACULTY OF ARTS.

The Professors of or Lecturers on the several Subjects, and the following additional Examiners:—

1. LANGUAGE AND LITERATURE.

Subjects.	Examiners.	Appointed	Patrons.
Latin	James Cruickshank Smith, M.A.	1894	University Court.
Greek			
English	Stewart Alan Robertson, M.A.	1895	Do.
French	Frederick P. Walton, M.A., LL.B.	1895	Do.
German			
Sanskrit	Arthur A. Macdonell, M.A.		Do.
Hebrew and Semitic Languages	Arthur P. Sym, M.A., B.D.	1895	Do.
Classical Archæology	Alex. S. Murray, LL.D.	1895	Do.
Celtic	Don. Masson, M.A., M.D.	1896	Do.

2. MENTAL PHILOSOPHY.

Logic and Metaphysics, Moral Philosophy	Jas. L. M'Intyre, M.A., D.Sc.	1895	Do.
Political Economy	J. R. N. Macphail, LL.B.	1895	Do.
Education	Maurice Paterson, LL.D.	1893	Do.
Philosophy of Law	J. Roberton Christie, LL.B.	1895	Do.

3. SCIENCE.

Mathematics	D. Beveridge Mair, M.A. Edin., B.A. Cantab.	1893	Do.
Natural Philosophy			
Astronomy	W. E. Plummer, M.A.	1895	Do.
Chemistry	John Gibson, Ph.D.	1893	Do.
Zoology	Arthur E. Shipley, M.A.	1895	Do.
Botany	J. Bretland Farmer, M.A.	1893	Do.
Geology	John Horne	1895	Do.

4. HISTORY AND LAW.

History	John Downie, M.A.	1895	Do.
Archæology and Art (History of)	S. Henbest Capper, M.A., A.R., I.B.A.	1896	Do.
Constitutional Law and History	J. Roberton Christie, LL.B.	1895	Do.
Roman Law			
Public Law			

II.—SCIENCE.

1. PURE SCIENCE.

The Professors of and Lecturers on the several subjects, and the additional Examiners in Mathematics, Natural Philosophy, Zoology, Botany, Chemistry, Astronomy, Anatomy, Physiology, and Geology.

2. ENGINEERING.

The Professors of and Lecturers on the several subjects, the additional Examiners in Mathematics, Natural Philosophy, and Chemistry, and in

Engineering	David A. Stevenson, B.Sc., M.Inst. C.E.	1894	University Court

3. PUBLIC HEALTH.

The Professors of and Lecturers on the several subjects, and the following additional Examiners:—

Subjects.	Examiners.	Appointed	Patrons.
Physics	William Harvey, L.L.B.	1893	University Court.
Laboratory Work	J. A. Cameron, M.D., B.Sc.	1893	Do.
Medicine in its bearings on Public Health	James O. Affleck, M.D.	1894	Do.
Sanitation, Sanitary Law, and Vital Statistics	F. W. Barry, M.D., D.Sc.	1892	Do.

4. AGRICULTURE.

The Professors of and Lecturers on the several subjects, and the following additional Examiners:—

The additional Examiners in Mathematics, Chemistry, Botany, Natural History, Geology, and Political Economy, and in

Agriculture	Wm. Somerville, B.Sc., D.Œcon.	1893	University Court.
Veterinary Hygiene	W. Owen Williams, F.R.C.V.S.	1893	Do.
Chemistry as applied to Agriculture	John Hunter, F.L.S., F.I.C., F.R.P.S.	1893	Do.
Political Economy	J. R. N. Macphail, L.L.B.	1895	Do.
Forestry	Wm. Somerville, B.Sc., D.Œcon.	1896	Do.
Agricultural Entomology	E. Ormerod	1896	Do.

III.—IN THE FACULTY OF DIVINITY.

The Professors in the Faculty of Divinity, and the following additional Examiners:—

George Gardiner, B.D.	1895	University Court
Arthur P. Sym., B.D.	1895	Do.

IV.—IN THE FACULTY OF LAW.

The Professors of, and Lecturers on, the several subjects, and the following additional Examiners:—

Scots Law, Conveyancing, and Medical Jurisprudence	Arthur T. Glegg, L.L.B.	1896	University Court.
Roman, Public, and Constitutional Law	J. Robertson Christie, L.L.B.	1895	Do.
Political Economy	J. R. N. Macphail, M.A., L.L.B.	1895	Do.

V.—IN THE FACULTY OF MEDICINE.

The Professors in the Faculty of Medicine, and the following additional Examiners:—

Clinical Surgery	John Duncan, M.D.	1896	University Court.
	J. M. Cotterill, M.B., C.M.	1896	Do.
	Frederick Page, M.D.	1896	Do.
Materia Medica	William Craig, M.D.	1892	Do.
Physiology	Prof. Stirling, M.D., D.Sc.	1892	Do.
Pathology	Alexander Bruce, M.D.	1892	Do.
Surgery	Geo. Thos. Beatson, M.D.	1892	Do.
Clinical Medicine	John Wyllie, M.D.	1892	Do.
Medical Jurisprudence	Fleld. W. Barry, M.D., D.Sc.	1892	Do.
Physics	William Harvey, L.L.B.	1892	Do.
Medicine	Alexander James, M.D.	1893	Do.
Midwifery	A. H. F. Barbour, M.D.	1893	Do.
Anatomy	D. J. Cunningham, M.D.	1893	Do.
Chemistry	John Gibson, Ph.D.	1893	Do.
Botany	J. Bretland Farmer, M.A.	1893	Do.
Natural History	Arthur E. Shipley, M.A.	1895	Do.

VI.—IN THE FACULTY OF MUSIC.

The Professor of Music and Sir ALEXANDER C. MACKENZIE

FOR SCHOOLMASTER'S DIPLOMA.

The Professor of Education and MAURICE PATERSON, B.A., LL.D. 1889.

FOR TITLE OF LITERATE IN ARTS.

The Professors of and Lecturers on the several subjects, and the Examiners for Degrees in Arts.

University Librarian.—HUGH ALEXANDER WEBSTER.

Assistant Librarians.—ALEXANDER ANDERSON; DAVID CUTHBERTSON; CHARLES MARTIN; WILLIAM WRIGHT; GEORGE TAIT; JAMES H. S. GREGORY, *at University New Buildings.*

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KEEPERS OF MUSEUMS.

Anatomical Museum	Professor Sir WM. TURNER.
Do. Assistant Keeper	JAMES SIMPSON.
Museum of Natural History	Professor EWART.

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Clerk of Senatus	THOMAS GILBERT.
Assistant Clerks	JAMES DOWIE, JOHN STIRTON.
Clerk of Works	ALLAN E. L. CLARK.
Janitor	JOHN CHAPMAN.
Warders	ALEX. ADAIR, JAMES DONALDSON.

GENERAL COUNCIL.

President	The Right Hon. ARTHUR JAMES BALFOUR, M.P., D.C.L., &c., Chancellor of the University.
Vice-Presidents	The Rector, The Principal, The Chancellor's Assessor, The Rector's Assessor.
Representative in Parliament	Sir WILLIAM OVEREND PRIESTLEY, K.B., M.D., LL.D.
Convener of Business Committee	J. CAMPBELL LORIMER, LL.B., Advocate.
Convener of Ordinances Committee	W. SCOTT DALGLEISH, LL.D., Publisher.
Convener of Finance Committee	DAVID D. BUCHAN, LL.B., S.S.C.
Secretary and Registrar	THOMAS GILBERT.

Constitution of the University.

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THE University of Edinburgh was originally the "College of Edinburgh" or "The Town's College," founded in 1583 by the Town Council of Edinburgh, under general powers granted by the Charter of King James VI., dated 14th April 1582. No Charter of foundation is extant; but from the first the College possessed the privilege of conferring degrees. This privilege was ratified by the "Act of Confirmation," passed in 1621, which secured to the "College of James VI." (as it had come to be called) all the rights, immunities, and privileges enjoyed by the Universities of Scotland. This ratification was renewed in the Treaty of Union between England and Scotland, and in the Act of Security. Gradually, in Acts of General Assembly, of Town Council, and of Parliament, the "College of James VI." came to be styled "The University of Edinburgh"; but it remained under the control and patronage of the Town Council down to 1858, when, by the Universities Act, all the Universities of Scotland received new and autonomous constitutions.

The University is a Corporation consisting of the Chancellor, Rector, Principal, Professors, Registered Graduates and Alumni, and Matriculated Students; and from 1858 to 1890 its government was vested in the Senatus Academicus (consisting of the Principal and the Professors), subject to the review and control of the University Court.

By the Universities (Scotland) Act 1889, the University Court was constituted a body corporate, to which the whole property belonging to the University at the passing of the Act was transferred, with full power of administration.

The Senatus, as heretofore, regulates the teaching and discipline of the University, subject to the provisions of the Universities Acts of 1858 and 1889.

CHANCELLOR.

The Chancellor is elected by the General Council for life. Changes in the ordinances and in University arrangements, proposed or approved by the University Court, must receive his

sanction. Degrees are conferred by him, or by the Vice-Chancellor. The Chancellor is President of the General Council, and nominates an Assessor in the University Court. Appointments:—

Right Hon. Lord Brougham, 1859.
Right Hon. John Inglis, D.C.L., LL.D., 1868.
Right Hon. ARTHUR J. BALFOUR, M.P., D.C.L., LL.D., &c., 1891.

VICE-CHANCELLOR.

The Vice-Chancellor, nominated by the Chancellor, may, in absence of the Chancellor, confer Degrees, but cannot discharge any other of the Chancellor's duties. In the Vice-Chancellor's absence Degrees are conferred by the Principal, or by the senior member of Senatus.

The Vice-Chancellor acts as Returning Officer at Parliamentary Elections. If there be no Vice-Chancellor at the time, the University Court appoints one to act as Returning Officer. Appointments:—

Sir D. Brewster, appointed 1860.
Sir Alexander Grant, Bart., 1868.
Sir WILLIAM MUIR, K.C.S.I., D.C.L., &c., 1885.

RECTOR.

The Rector is elected by the Matriculated Students in the University on such day in October or November as may be fixed by the University Court after consultation with the Senatus, but not later than the second Saturday in November. The term of office is three years. The next election will take place in 1896. The Rector is President of, and nominates an Assessor in, the University Court. He may, before he appoints his Assessor, confer with the Students' Representative Council. No Principal or Professor of any Scottish University is eligible. Appointments:—

Rt. Hon. W. E. Gladstone, 1859.
Thomas Carlyle, 1865.
Rt. Hon. Lord Moncreiff, 1868.
Sir W. Stirling Maxwell, Bt., 1871.
Rt. Hon. Earl of Derby, 1874.
Most Hon. Marquess of Hartington, M.P., 1877.
Rt. Hon. Earl of Rosebery, 1880.
Rt. Hon. Earl of Iddesleigh, 1883.
Most Hon. Marquess of Lothian, 1887.
Rt. Hon. George J. Goschen, M.P., LL.D., 1890.
Rt. Hon. J. P. B. ROBERTSON, LL.D., 1893.

REPRESENTATIVE IN PARLIAMENT.

Under Clauses 27 to 41 of the "Representation of the People (Scotland) Act," 31 & 32 Vict., cap. 48, the General Councils of the Universities of Edinburgh and St Andrews elect a Member of Parliament for these Universities.

When a poll is demanded, the votes are given by voting papers issued by the Registrar.

The appointments have been—

Sir Lyon Playfair, K.C.B., LL.D., 1868.

Rt. Hon. J. H. A. Macdonald, C.B., Q.C., LL.D., 1885, 1886.

M. T. Stormonth Darling, Q.C., 1888.

Rt. Hon. Sir Charles J. Pearson, Q.C., LL.D., 1890, 1892.

Sir WILLIAM OVEREND PRIESTLEY, K.B., M.D., LL.D., 1896.

The Parliamentary constituency for 1896 is as follows :—

Edinburgh	7891
St Andrews	1474
Total in 1896	9365

UNIVERSITY COURT.

Under the Universities Act 1858, the Court has power :—

1. To review all decisions of the Senatus, and to be a Court of Appeal from the Senatus, except as otherwise provided in the Universities Act.

2. To effect improvements in the internal arrangements of the University, after due communication with the Senatus, and with the sanction of the Chancellor; provided all such proposed improvements be submitted to the General Council for consideration.

3. To require due attention on the part of the Professors to the Regulations as to the mode of teaching and other duties imposed on the Professors.

4. To fix and regulate, from time to time, the Fees in the several Classes.

5. Upon sufficient cause shewn, and after due investigation, to censure any member of the Senatus, or to suspend him from office, and from the emoluments thereof, in whole or in part, for any period not exceeding one year, or to require him to retire on a retiring allowance, or to deprive him of office; and during the suspension of any Professor, to make provision for the teaching of his class: provided no such sentence of censure, suspension, deprivation, etc., shall have effect until approved by Her Majesty in Council.

By Sec. xix. any of the Rules and Ordinances enacted by the Universities Commissioners under the Act, may be altered or revoked by the University Court of the University to which they are applicable, but only with the written consent of the Chancellor, and with the approval of Her Majesty in Council.

By the Universities (Scotland) Act 1889, the University

Court is a body corporate with perpetual succession and a common seal; and all the property belonging to the University at the passing of the Act is now vested in that body.

By the same Act, the University Court, besides the powers conferred upon it by the Act of 1858, has power—

(1.) To administer and manage the whole revenue and property of the University, including funds mortified for bursaries and other purposes, and have all the powers necessary for the purpose.

(2.) To review any decision of the Senatus appealed against by a member of Senatus, or other member of the University having an interest, and to take into consideration all representations and reports made to it by the Senatus and by the General Council.

(3.) To review, on representation made by any of its members, or by any member of Senatus, any decision which the Senatus may come to under section seven, sub-section one, but the University Court shall not review any decision of the Senatus in a matter of discipline, except upon appeal taken either by a member of Senatus or by a member of the University directly affected.

(4.) To appoint professors whose chairs are in the patronage of the University; to appoint examiners and lecturers; and to grant recognition to the teaching of any college or individual teacher for the purposes of graduation.

(5.) To define, on application by any member of Senatus, the nature and limits of a professor's duties under his commission.

(6.) To take proceedings against a principal or professor, University lecturer, assistant, recognised teacher or examiner, or other person employed in teaching or examining, without the necessity of any one not a member of the Court appearing as prosecutor, and in such proceedings to call any member of the University to give evidence, and to require the production of documents, and to institute any inquiries it may deem necessary.

(7.) To appoint from among members of the University or others, not being members of the Senatus, one third of the members of any committee charged, by ordinance of the Commissioners, with the superintendence of any libraries or museums belonging to the University; and on representation made by any of its members, or by any member of Senatus, to review any decision which the Senatus, in the exercise of its powers, may come to in respect of the recommendations of such committee.

(8.) To appoint committees of its own number, of not less than five members, with powers to report on any business entrusted to them by the University Court, or to carry out special instructions ordered by the Court.

(9.) To elect the representative of the University on the General Medical Council, under the Medical Act 1886.

(10.) After the expiration of the powers of the Commission to found new professorships, with the approval of the Universities Committee.

After the expiration of the powers of the Commissioners, the University Court, by Section 21, has power to make new ordinances, with the approval of Her Majesty in Council:

(1.) With respect to the appropriation of the sum allotted to the University by the Commissioners out of the annual grant.

(2.) Altering or revoking ordinances framed under the Universities Act 1858, or this Act; and making new ordinances: provided that such ordinances, before being submitted to Her Majesty for approval, have been communicated by the University Court to the Senatus, to the General Council, and to the University Courts of the other Universities.

Meetings of the Court are held for ordinary business on the first Monday after the 11th of each month, except August and September, and on the first Monday after 19th January, if necessary, for hearing Registration Appeals. Other meetings may be called as the Court may direct. Special Meetings may be called by order of the Rector or the Principal, or by the Secretary on a requisition specifying the object, signed by at least three members of the Court.

The University Court holds the patronage of the Chair of Music; of the new Chair of History; in conjunction with the President of the Royal Scottish Academy, that of the Chair of Fine Art; and a share in the patronage of the Chair of Agriculture. It also elects three of the seven Curators of Patronage, and appoints the Lecturers and the Additional Examiners for Degrees.

The Court consists of—1. The Rector; 2. The Principal; 3. The Lord Provost of Edinburgh for the time being; 4. An Assessor nominated by the Chancellor; 5. An Assessor nominated by the Rector; 6. An Assessor nominated by the Lord Provost, Magistrates, and Town Council of Edinburgh; 7. Four Assessors elected by the General Council; 8. Four Assessors elected by the Senatus Academicus; 9. A number, not exceeding four, of representatives of affiliated Colleges, under section 15 (4) of the Act of 1889 (a number which, in special circumstances, may be increased).

Seven members constitute a quorum. The Rector and his Assessor continue in office for three years; but when the Chancellor or the Rector ceases to hold office, his Assessor continues to be a member of the Court until an Assessor is nominated by the new Chancellor or Rector. The other Assessors hold office for four years; and all Assessors are eligible for re-election. No Principal or Professor of any Scottish University is eligible as

Assessor to any other person or body than the Senatus. The Rector, and in his absence the Principal, presides at meetings of the Court, and in the absence of both a chairman is elected by the meeting. The person presiding at any meeting of the Court has a deliberative vote, and also a casting vote in case of equality.

An abstract of the proceedings of the Court is given in a subsequent part of the Calendar.

The names of the present Assessors are given on page 1. The names of the Assessors before 1888 will be found in the Historical Appendix to List of University Graduates, published in 1889 (page 105). Assessors since 1888—*Elected by Chancellor*, T. Graham Murray, LL.D., 1887-1891. *Elected by Senatus*, A. Campbell Fraser, D.C.L., LL.D., 1877-1891, Malcolm Campbell Taylor, D.D., 1889-1892. *Elected by Town Council*, John Clapperton, 1885-1895.

UNIVERSITIES COMMITTEE OF PRIVY COUNCIL.

The Scottish Universities Committee of the Privy Council consists of the Lord President of the Privy Council, the Secretary for Scotland; the Lord Justice-General, Lord Justice-Clerk, Lord Advocate, and the Chancellor and the Lord Rector of each of the Universities, if members of the Privy Council; one member at least of the Judicial Committee of the Privy Council; and such other member or members of the Privy Council as Her Majesty may appoint.

The powers and duties of this Committee may, subject to rules or regulations passed by Her Majesty in Council, be exercised and discharged by any three or more of the members, one of whom shall be a member of the Judicial Committee of the Privy Council or a Senator of the College of Justice in Scotland.

CURATORS OF PATRONAGE.

By the Universities Act of 1858, the patronage of seventeen Chairs, previously in the gift of the Town Council, was transferred to seven Curators—three nominated by the University Court, and

four by the Town Council. The Curators also have a share in the patronage of the Chairs of Humanity, Agriculture, Civil Law, History (and Constitutional Law), Scots Law, and Conveyancing, formerly in the gift of the Town Council, and of the Chairs of Celtic and of Political Economy, instituted after the passing of the 1858 Act. The Curators hold office for three years. The names of the present Curators are given on page 2.

REPRESENTATIVE IN GENERAL MEDICAL COUNCIL.

Under the Medical Act of 1886, the University is entitled to elect a Member of the General Medical Council. Professor Sir William Turner was elected by the Senatus in December 1886 for five years. Under the Universities Act of 1889, the University Representative is now elected by the University Court, by whom Professor Sir William Turner, M.B., D.C.L., LL.D., was again elected in 1891.

PRINCIPAL.

The Principal, formerly elected by the Town Council, now by the Curators, holds office for life. He is the President of the Senatus Academicus ; in absence of the Rector, he presides at the meetings of the University Court ; and in absence of the Chancellor and Rector he presides at the Statutory Meetings of the General Council, and also at the Special Meetings, except for the election of Assessors.

Principals Elected since 1586.

1586. Robert Rollock, *previously Regent*
1599. Henry Charteris
1620. Patrick Sands
1622. Robert Boyd
1623. John Adamson
1653. Robert Leighton
1662. William Colvill
1675. Andrew Cant
1685. Alexander Monro
1690. Gilbert Rule
1703. William Carstares
1716. William Wishart
1730. William Hamilton
1732. James Smith
1736. William Wishart, *secundus*
1754. John Gowdie
1762. William Robertson
1793. George Husband Baird
1840. John Lee
1859. Sir David Brewster
1868. Sir Alexander Grant, Bart.
1885. Sir Wm. Muir, K.C.S.I.

SENATUS ACADEMICUS.

The Principal and the Professors constitute the Senatus. This body superintends and regulates the teaching and discipline of the University. The Senatus elects four Assessors in the University Court who hold office for four years. Two retire biennially, but may be re-elected; and in case of a casual vacancy, the person elected to fill it goes out of office when the person whom he succeeded would in the ordinary rotation have retired. The Senatus appoints two-thirds of the members of the Library and the Museums Committees, receives their reports, and, subject to the review of the University Court, confirms, modifies, or rejects such reports. It also elects a representative in the General Assembly of the Church of Scotland; two Managers of the Royal Infirmary; two Governors of George Heriot's Trust; two Governors of Morrison's Academy, Crieff; two Governors of the Spence Bursary Trust; one Governor of Dollar Institution; and one Governor of Stiell's Hospital, Tranent. Degrees in Arts, Science, Divinity, Law, Medicine, and Music are conferred, on the recommendation of the Senatus, by either the Chancellor, the Vice-Chancellor, the Principal, or the senior Professor present. The Principal is President of the Senatus, with a deliberative and also a casting vote; and, in his absence, the Senior Professor present acts as Chairman, also with a double vote. The Ordinary Meetings of Senatus are held on the third Saturday of October, the last Saturday of November, January, February, and March; the Saturday immediately preceding the Christmas vacation; on the last Friday of May, June, and July; on 1st August, not being a Sunday (for conferring Degrees); and in April (for Degrees) on a day fixed at the January Meeting of the preceding year. Extraordinary Meetings may be called by the Principal or by three Professors. One-third of the Senatus constitutes a quorum.

The Secretary of Senatus, among other duties, summons the Meetings, prepares the Minutes, and intimates business assigned to the Principal, the Faculties, the Boards of Studies, &c. He also administers the *Sponsio Academica* to Graduates.

FACULTIES.

The University now contains six Faculties, as constituted by Ordinance in 1893 viz., Arts, Science, Divinity, Law, Medicine, and Music. Each Faculty is presided over by a Dean, who is elected by the Professors of his Faculty, and who, among other duties, presents to the Chancellor or Vice-Chancellor the Graduands of his Faculty. The Deans are named on pp. 2, 3, and 4. The Chairs in the various Faculties are here given in chronological order. The Faculties as previously constituted are given in the CALENDAR for 1893-94, and in previous CALENDARS.

FACULTY OF ARTS.

The Faculty of Arts embraces the Chairs of Humanity (Latin), Greek, Mathematics, Logic and Metaphysics, Moral Philosophy, Natural Philosophy, Hebrew and Semitic Languages, History (two Chairs), Rhetoric and English Literature, Sanskrit and Comparative Philology, Commercial and Political Economy, Education, Fine Art, and Celtic.

REGENTS AND PROFESSORS IN THE FACULTY OF ARTS SINCE 1583.

Regents of Philosophy, 1583-1708.

[*The Regents of Philosophy taught in rotation the four classes in the Curriculum of Arts, the "Bajans," the "Semi-Bajans," the "Bachelors," and the "Magistrands," as the Students of the first, second, third, and fourth year were respectively styled. Each Regent therefore taught every subject in the Curriculum—the Regent of Humanity being subordinate to the Regent of Philosophy, and being employed as a tutor in Classics for Unmatriculated Students. In 1708 the system was changed, and separate Professors for Latin, Greek, Logic and Metaphysics, Moral Philosophy and Natural Philosophy, were substituted for the Regents. A Professorship of Mathematics had previously existed.*]

1583. Robt. Rollock, *first Regent*
1583. Duncan Nairn
1585. Charles Lumisdaill
1586. Adam Colt
1586. Alexander Scrimgeour
1587. Philip Heslop
1588. Charles Ferme or Fairholm
1589. Henry Charteris
1589. Patrick Sands
1594. George Robertson
1597. William Craig
1597. John Adamson
1598. James Knox
1598. Robert Scott
1601. Andrew Young
1603. James Reid
1604. David Munro
1606. Blase Colt
1607. James Fairley
1608. William King
1611. Andrew Stevenson
1625. Samuel Rutherford
1625. Robert Ranken
1626. Thomas Crawford
1626. John Brown
1631. Alexander Hepburn

1636. James Wyseman
1638. James Wright
1638. Robert Young
1639. Duncan Forrester
1644. William Tweedie
1644. James Pillans
1647. Andrew Suttie
1653. John Wishart
1665. George Sinclair
1666. John Wood
1667. William Paterson
1679. Gilbert M'Murdoch
1679. Andrew Massie
1680. Alexander Cockburn
1682. Robert Lidderdail
1684. Herbert Kennedy
1686. Thomas Burnet
1689. Alexander Cunningham
1690. William Law
1695. John Row
1695. William Scott
1701. Charles Areskine
1703. Robert Stewart
1707. Colin Drummond

Regents of Humanity, 1597-1708.

1597. John Ray
1606. Blase Colt
1611. Oliver Colt
1611. Robert Burnet
—— Andrew Stevenson
1623. Samuel Rutherford
1626. Thomas Craufurd
1630. John Armour
1633. Alexander Gibson
1636. James Wyseman
1638. Robert Young
1644. James Pillans
1653. John Wishart
1656. William Forbes
1656. James M'Gowan
1658. Hugh Smith
1663. William Cumming
1665. Andrew Ross
1665. Thomas Bell
1676. Gilbert MacMurdo
1679. Alexander Cunningham
1689. John Drummond

Professsors of Mathematics.

1620. Andrew Young
1640. Thomas Craufurd
1674. James Gregory
1683. David Gregory
1692. James Gregory
1725. Colin M'Laurin
1747. Matthew Stewart
1775. Dugald Stewart
1785. Adam Ferguson
1785. John Playfair
1805. John Leslie
1819. William Wallace
1838. Philip Kelland
1879. GEORGE CHRYSTAL

Professors of Humanity.

1708. Laurence Dundas
1728. Adam Watt
1734. John Kerr
1741. George Stuart
1775. John Hill
1806. Alexander Christison
1820. James Pillans
1863. William Young Sellar
1891. Harry Chester Goodhart
1895. WILLIAM ROSS HARDIE

Professors of Greek.

1708. William Scott, *one of the Regents*
1729. William Scott, *secundus*
1730. Colin Drummond
1738. Robert Law
1741. Robert Hunter
1772. Andrew Dalziel
1805. George Dunbar
1852. John Stuart Blackie
1882. SAMUEL HENRY BUTCHER

Professors of Logic and Metaphysics.

1708. Colin Drummond, *one of the Regents*
1730. John Stevenson
1774. John Bruce
1786. James Finlayson
1808. David Ritchie

1836. Sir Wm. Hamilton, Bart.
1856. Alexander Campbell Fraser
1891. ANDREW SETH

Professors of Moral Philosophy.

1708. William Law, *one of the Regents*
1729. William Scott
1734. John Pringle
1745. William Cleghorn
1754. James Balfour
1764. Adam Ferguson
1785. Dugald Stewart
1810. Thomas Brown
1820. John Wilson
1853. P. C. M'Dougall
1868. HENRY CALDERWOOD

Professors of Natural Philosophy.

1708. Robert Stewart, *one of the Regents*
1742. John Stewart
1759. Adam Ferguson
1764. James Russell
1774. John Robison
1805. John Playfair
1819. Sir John Leslie
1833. James David Forbes
1860. PETER GUTHRIE TAIT

Professors of Hebrew and Semitic Languages.

(See Faculty of Divinity.)

Professors of History.

1719. Charles Mackie
1753. John Gordon
1754. William Wallace
1755. John Pringle
1780. Alexander Fraser Tytler
1801. William Fraser Tytler
1821. Sir William Hamilton
1837. George Skene
1842. George Frederick Ferrier
1846. Cosmo Innes
1874. Æneas Jas. Geo. Mackay
1881. JOHN KIRKPATRICK
1894. GEORGE W. PROTHERO

Professors of Rhetoric and English Literature.

1762. Hugh Blair
1784. William Greenfield
1801. Andrew Brown
1835. George Moir
1840. William Spalding
1845. William Edmondstoune Aytoun
1865. David Masson.
1895. GEORGE SAINTSBURY.

Professors of Sanskrit.

1862. Theodor Aufrecht
1875. JULIUS EGGELING

Professors of Political Economy.

(See also Faculty of Law.)

1871. W. B. Hodgson
1880. JOSEPH SHIELD NICHOLSON

Professor of Education.

1876. SIMON SOMERVILLE LAURIE

Professor of Fine Art.

1880. GERARD BALDWIN BROWN

Professor of Celtic Languages, &c.

1882. DONALD MACKINNON

FACULTY OF SCIENCE.

[As Constituted in 1893 by Ordinance No. 12 (General No. 7).]

This Faculty embraces the Chairs of Mathematics, Natural Philosophy, Botany, Anatomy, Chemistry, Physiology, Natural History, Astronomy, Agriculture, Engineering, and Geology.

PROFESSORS IN THE FACULTY SINCE ITS INSTITUTION IN 1893.

For Professors of Mathematics and Natural Philosophy, see under Faculty of Arts. For Professors of Botany, Anatomy, Chemistry, Physiology, Natural History, see under Faculty of Medicine.

Professors of Practical Astronomy.

1786. Robert Blair
1834. Thomas Henderson
1846. Charles Piazzi Smyth
1889. RALPH COPELAND

Professors of Agriculture.

1790. Andrew Coventry
1831. David Low
1854. John Wilson
1885. ROBERT WALLACE

Professors of Engineering.

1868. Fleeming Jenkin
1885. GEORGE FREDERICK ARMSTRONG

Professors of Geology.

1871. Archibald Geikie
1882. JAMES GEIKIE

Professor of Technology.

1855. George Wilson
[Chair abolished in 1859.]

FACULTY OF DIVINITY.

This Faculty, the second in date, consists of the Chairs of Divinity, Hebrew and Semitic Languages, Ecclesiastical History, and Biblical Criticism and Antiquities.

PROFESSORS IN THE FACULTY OF DIVINITY SINCE 1620.

Professors of Divinity.

1620. Andrew Ramsay
1627. Henry Charteris
1629. James Fairley
1630. John Sharpe
1648. Alexander Colvill
1649. Samuel Rutherford
1650. David Dickson
1662. Patrick Scougall
1664. William Keith
1675. Laurence Charteris
1682. John Menzies
1683. John Strachan
1690. George Campbell
1701. George Meldrum
1709. William Hamilton
1732. James Smith
1733. John Gowdie
1754. Robert Hamilton
1779. Andrew Hunter
1809. William Ritchie
1828. Thomas Chalmers
1844. John Lee
1859. Thomas J. Crawford
1876. ROBERT FLINT

Professors of Hebrew.

1642. Julius Conradus Otto
1656. Alexander Dickson
1679. Alexander Amedeus
1681. Alexander Douglas
1692. Patrick Sinclair
1694. Alexander Rule
1702. John Goodall
1719. James Crawford
1732. William Dawson
1751. James Robertson
1792. George Husband Baird
1793. William Moodie
1812. Alexander Murray
1813. Alexander Brunton
1848. David Liston
1880. David Laird Adams
1892. John Dobie
1895. ARCHIBALD ROBERT STIRLING KENNEDY

Professors of Ecclesiastical History.

1702. John Cumming
1715. William Dunlop
1726. Matthew Crawford
1737. Patrick Cumming
1762. Robert Cumming
1788. Thomas Hardie
1799. Hugh Meiklejohn
1831. David Welsh
1844. James Robertson
1861. William Stevenson
1872. Robert Wallace
1876. Malcolm Campbell Taylor

Professors of Biblical Criticism and Biblical Antiquities.

1847. Robert Lee
1868. Archibald Hamilton Charteris

FACULTY OF LAW.

To this Faculty belong seven Chairs, viz.:—Public Law, Civil or Roman Law, History (Constitutional, &c.), Scots Law Forensic Medicine, Conveyancing, and Political Economy.

Professors in the Faculty of Law since 1707.

Professors of Public Law.

1707. Charles Areskine
1734. William Kirkpatrick
1735. George Abercrombie
1759. Robert Bruce
1764. James Balfour
1779. Allan Maconochie
1796. Robert Hamilton
1832. * * *
1862. James Lorimer
1890. Sir Ludovic Grant, Bt.

Professors of Civil Law.

1710. James Craig
1732. Thomas Dundas
1745. Kenneth M'Kenzie
1755. Robert Dick
1792. John Wilde
1800. Alexander Irving
1827. Douglas Cheape
1842. A. Campbell Swinton
1862. James Muirhead
1889. Henry Goudy
1893. James Mackintosh

Professors of History (Constitutional, &c.).

1719. Charles Mackie
1753. John Gordon
1754. William Wallace
1755. John Pringle
1780. Alex. Fraser Tytler
1801. William Fraser Tytler
1821. Sir William Hamilton
1837. George Skene
1842. James Frederick Ferrier
1846. Cosmo Innes
1874. Æneas Jas. Geo. Mackay
1881. John Kirkpatrick

Professors of Scots Law.

1722. Alexander Bayne
1737. John Erskine
1765. William Wallace
1786. David Hume
1822. George Joseph Bell
1843. John Schank More
1861. George Ross
1864. George Moir
1865. Norman Macpherson
1888. John Rankine

Professors of Forensic Medicine.

1807. Andrew Duncan, *secundus*
1820. William Pulteney Alison
1822. Robert Christison
1832. Thomas Stewart Traill
1862. Sir Douglas Maclagan

Professors of Conveyancing.

1825. Macvey Napier
1847. Allan Menzies
1856. A. Montgomerie Bell
1866. James Stuart Fraser Tytler
1892. JOHN PHILP WOOD

Professors of Political Economy.[1]

1871. W. B. Hodgson, and reappointed 1878
1880. JOSEPH SHIELD NICHOLSON

FACULTY OF MEDICINE.

The Faculty consists of twelve Chairs:—Botany, Physiology, Medicine, Anatomy, Chemistry, Midwifery, Natural History Materia Medica, Surgery, Clinical Surgery, Forensic Medicine, and Pathology. The Professors of Medicine, Materia Medica, and Pathology, are also Professors of Clinical Medicine. Some of these Chairs were instituted in the seventeenth century, but it does not appear that the Medical School and Faculty of the University were established until the beginning of last century.

PROFESSORS IN THE FACULTY OF MEDICINE SINCE 1676.

Professors of Botany.

1676. James Sutherland
1706. Charles Preston
1712. George Preston

Professors of Medicine and Botany.

1738. Charles Alston
1761. John Hope
1786. Daniel Rutherford
1820. Robert Graham
1845. John Hutton Balfour

Professors of Botany.

1879. Alexander Dickson
1888. ISAAC BAYLEY BALFOUR

Professors of Medicine.

1685. Sir Robert Sibbald, James Halket, Archibald Pitcairne

Professors of Institutes of Medicine or Physiology.

1724. William Porterfield
1726. Andrew St Clair, John Rutherford
1747. Robert Whytt
1766. William Cullen
1773. Alex. Monro Drummond
1776. James Gregory
1789. Andrew Duncan
1819. Andrew Duncan, *secundus*
1821. William Pulteney Alison
1842. Allen Thomson
1848. John Hughes Bennett
1874. WILLIAM RUTHERFORD

Professors of Medicine.

1724. William Porterfield
1726. Andrew St Clair, John Rutherford
1747. Robert Whytt
1766. John Gregory
1773. William Cullen
1790. James Gregory
1821. James Home
1842. William Pulteney Alison
1855. Thomas Laycock
1876. Sir THOMAS GRAINGER STEWART

[1] This Chair was declared to be a Professorship in the Law as well as in the Arts Faculty by resolution of the Senatus Academicus in 1879.

Professors of Anatomy.

1705. Robert Elliot
1708. Adam Drummond
1716. John M'Gill
1720. Alexander Monro
1754. Alex. Monro, *secundus*
1798. Alexander Monro, *tertius*
1846. John Goodsir
1867. Sir WILLIAM TURNER

Professors of Chemistry and Medicine.

1713. James Crawford
1726. Andrew Plummer
1726. John Innes
1755. William Cullen
1766. Joseph Black
1795. Thomas Charles Hope

Professors of Chemistry.

1844. William Gregory
1858. Lyon Playfair
1869. ALEX. CRUM BROWN

Professors of Midwifery.

1726. Joseph Gibson
1739. Robert Smith
1756. Thomas Young
1780. Alexander Hamilton
1800. James Hamilton
1840. Sir J. Y. Simpson, Bart.
1870. ALEXANDER RUSSELL SIMPSON

Professors of Natural History.

1770. Robert Ramsay
1779. John Walker
1804. Robert Jameson
1854. Edward Forbes
1855. George James Allman
1870. Sir Wyv. T. C. Thomson
1882. JAMES COSSAR EWART

Professors of Materia Medica.

1768. Francis Home
1798. James Home
1821. Andrew Duncan, *secundus*
1832. Sir Robt. Christison, Bart.
1877. THOMAS RICHARD FRASER

Professors of Surgery.

1777. Alex. Monro, *secundus*
1798. Alexander Monro, *tertius*
1831. John William Turner
1836. Sir Charles Bell
1842. James Miller
1864. James Spence
1882. JOHN CHIENE

Professors of Clinical Surgery.

1803. James Russell
1833. James Syme
1869. Joseph Lister
1877. THOMAS ANNANDALE

Professors of Forensic Medicine
(See Faculty of Law.)

Professors of Pathology.

1831. John Thomson
1842. William Henderson
1869. W. R. Sanders
1881. WILLIAM SMITH GREENFIELD

Professors of Military Surgery.

1806. John Thomson
1823. Sir George Ballingall
[Chair abolished.]

FACULTY OF MUSIC.

Reid Professors of Music

1839. John Thomson.
1841. Sir Henry Rowley Bishop
1844. Henry Hugh Pearson
1845. John Donaldson
1865. Sir Herbert Stanley Oakeley
1891. FREDERICK NIECKS

The Principal is a member of this Faculty *ex officio*, and Professor Kirkpatrick was appointed a member by the Senatus.

GENERAL COUNCIL OF THE UNIVERSITY.

The Chancellor, the Members of the University Court, the Professors, and the Graduates, are entitled to be registered as Members of the General Council. The fee for registration is £1.

The Register, now containing 7891 Members, is conclusive of the rights of persons to be Members up to 1st January 1897. By the Universities Elections Amendment (Scotland) Act all candidates for graduation must pay the Registration Fee before they can appear for graduation.

Under the Universities Act of 1858, and the Commissioners' Ordinance No. 1, section 3, the Council meets twice a year—viz., on the *first Tuesday after the fourteenth day of April*, and on the *last Friday in October*, at three o'clock P.M., "*to take into their consideration* all questions affecting the well-being and prosperity of the University, and to *make representations from time to time on such questions* to the *University Court*, who shall consider the same, and return to the Council their deliverance thereon." All proposed improvements in the arrangements of the University "shall be submitted to the University Council for their consideration."

By the Universities Act 1889, besides the two statutory meetings above mentioned, the Council "may hold special meetings at the instance of the Chancellor, who shall convene such meetings on a requisition from a quorum of members, and the Council may adjourn any meeting, and may appoint Committees to investigate into and report upon any matter remitted to them or to carry out instructions given to them by the Council." The Commissioners under this Act have fixed the quorum of the General Council at ten for every thousand or fraction of a thousand of members on the register, but this provision does not apply to the statutory half-yearly meetings, or to adjourned meetings.

At the meetings of the General Council, in the absence of the Chancellor, Rector, and Principal, the Chancellor's Assessor, and in his absence the Rector's Assessor shall preside; and in the absence of all of these, a Chairman shall be elected by

the meeting, but no member of Senatus can preside at any meeting held for the election of an Assessor or Assessors. The Chairman shall decide all points of order, and has a deliberative and a casting vote; and in case of an equality of votes at the conclusion of a poll, the Chairman, or any one appointed by the University Court to act for him, shall have a casting vote.

The General Council of this University, and that of the University of St Andrews together, return a Member of Parliament.

The *Chancellor* of the University and *four of the Assessors* in the University Court are elected by the Council. The Chancellor holds office for life, and the Assessors for four years. Two of the Assessors retire biennially, but may be re-elected. In case of a casual vacancy the person elected to fill it retires when the person whom he succeeded would in ordinary rotation have retired. No member of the Senatus can vote or take part in the election of any Assessor of the General Council. The next election of two Assessors will take place at the statutory half-yearly meeting in *October* 1897.

Members of General Council are entitled to the use of the University Library on payment of an annual fee of 10s. 6d., or they may compound for such annual fee by one payment of £5, 5s.

Three Standing Committees have been appointed by the General Council—viz., a Business Committee, an Ordinances Committee, and a Finance Committee. The Conveners are:

Business Committee—J. Campbell Lorimer, LL.B.
Ordinances Committee—W. Scott Dalgleish, LL.D.
Finance Committee—David D. Buchan, LL.B.

STUDENTS' REPRESENTATIVE COUNCIL.

Presidents—A. C. Sturrock, M.A.; J. Y. Simpson, M.A.; J. Bannerman. *Joint Hon. Secretaries and Treasurers*—J. R. Hunter, 59 Marchmont Road; W. Ogilvy, M.A., 97 Marchmont Road.

The Students' Representative Council was founded in 1884. Its aims are—(1) To represent the Students in matters affecting their interests; (2) To afford a recognised means of com-

munication between the Students and the University authorities; and (3) To promote social life and academic unity among the Students. The Council is elected annually in November, partly by the Students of the different Faculties, and partly by the recognised Students' societies. Meetings are held in November, December, January, February, March, May, June, July, and October. At the November meeting an executive committee is elected, consisting of three presidents, two secretaries and treasurers, and ten other members, representing the four Faculties.

The Commissioners, acting under the Universities Act 1889, have issued an Ordinance to the following effect :—

(1.) The Students' Representative Council shall submit to the University Court the regulations under which it exists, and these regulations as approved shall form the constitution of the Students' Representative Council.

(2.) After the University Court has approved of the constitution, alterations must receive the approval of the University Court.

(3.) 1. The Council may petition the Senatus as to any matter affecting the teaching and discipline of the University, and the Senatus shall dispose of the matter, or shall, if so prayed, forward such petition to the University Court, with such observations as it may make thereon.

2. The Council may petition the University Court as to any matter affecting the Students other than those falling under sub-section 1.

3. This Section shall not prejudice any right of appeal under Section 6, subsection 2, of the said Act, nor the powers and jurisdiction of the Senatus, as to teaching and discipline.

MATRICULATION.

University Matriculation consists in signing the Sponsio Academica, the Student thus entering his or her name in the Album of Students of the University, and in paying a fee of £1, 1s. for the academic year (1st Oct. to 1st Oct.), or a fee of 10s. 6d. for a Summer Session (1st May to 1st October). No one can attend a University Class without matriculating, except in those special cases in which an Entrance Fee of 5s. only is exacted (see below).

The Matriculated Students elect the Rector of the University. In case of an equality of votes, the Chancellor, or failing him, the Principal, has the casting vote. Students are also admitted to the University Library, and on certain days to the Museum of Natural History.

Candidates for Graduation who are attending Extra-Academical Lectures in Edinburgh, and not attending Classes within the University, must, at the beginning of each year, enrol their names in a book kept for that purpose, and pay a Fee of the same amount as the Matriculation Fee. In respect of such payment they have a right to use the University Library.

Sponsio Academica signed by students on matriculating :—

QUOD FAUSTUM FELIXQUE SIT. A. D.——

Ego Universitatis Academicae Edinburgensis Discipulus sinceré ac sancté promitto quod et syngraphâ hac meâ in perpetuum testatum cupio, mihi ante omnia cordi ac curae futurum verae pietatis studium ; me etiam in assuetis academici curriculi studiis sedulum fore, ut adolescentem bene institutum decet ; et quamdiu in illo curriculo permansero praeceptoribus omnibus morigerum memet praestiturum, nec ullius dissidii aut tumultus clam palamve vel auctorem vel participem futurum, et per reliquam vitam Universitatem Academicam Edinburgensem ipsam grato et benevolo animo prosecuturum, idque omnibus officiis pro facultate mea et occasione data testaturum esse.

MATRICULATIONS (1st May 1895 to 1st May 1896).

FOR SUMMER SESSION 1895 :—

I. Faculty of Arts	12	
II. Faculty of Science	7	
III. Faculty of Divinity	1	
IV. Faculty of Law	5	
V. Faculty of Medicine	27	
	——	52

FOR ACADEMIC YEAR :—

I. Faculty of Arts	690	
II. Faculty of Science	132	
III. Faculty of Divinity	66	
IV. Faculty of Law	435	
V. Faculty of Medicine	1466	
VI. Faculty of Music	8	
	——	2727
Total Matriculations (1st May 1895 to 1st May 1896)		2779

NON-MATRICULATED EXTRA-ACADEMICAL STUDENTS IN EDINBURGH.

(1st May 1895 to 1st May 1896.)

I. Faculty of Medicine	63
Total Non-Matriculated Extra-Academical Students (1st May to 1st May)	63

The University Court may admit non-Matriculated Students to any Class, on payment of an Entrance Fee (fixed at 5s.) in addition to the Class Fee; but such attendance (1) will not qualify for Graduation, (2) nor entitle the Student to a Certificate of Attendance, (3) nor confer any other University privilege.

Courses which may be attended under this Regulation :—

Constitutional History, additional Courses on.
Fine Art, short additional Courses on.
Economic History, short Courses on (in connection with Political Economy).
Procedure and Evidence.
Mental Diseases.
Diseases of the Eye.
Clinical Instruction on Diseases of Children.
Comparative Embryology.
Forestry.
Agricultural Entomology.
Music Classes.
Practical Pathological Bacteriology.
Chemical Laboratory
Experimental Pharmacology.
Italian Language and Literature.
Celtic (for Classes not qualifying for Graduation).
German Literature, twenty lectures.
International Private Law.

Number of Non-Matriculated Students who have paid the Entrance Fee, 1st May 1895 to 1st May 1896—84.

Other Courses may be sanctioned under this Regulation.

Students are subject to the disciplinary jurisdiction of the Senatus. Among offences visited with severe academic penalties may be mentioned riotous or disorderly conduct, copying at examinations, and mutilating or disfiguring books belonging to the Library.

UNIVERSITY EXAMINERS.

The Examiners for Degrees are the Professors of, or Lecturers on, the different subjects, along with additional Examiners appointed by the University Court. As a general rule, no Professor, Lecturer, or University Assistant or Demonstrator can be appointed an additional Examiner.

GRADUATION CEREMONIALS.

The relative precedence of each Faculty is as follows:—1. Divinity; 2. Law; 3. Medicine; 4. Arts; 5. Science; 6. Music. The Deans take precedence in their respective Faculties, followed by the Members of their Faculties in the order of the dates of their Commissions.

Public Graduation Ceremonials are held annually about the middle of April (chiefly for Divinity, Law, Arts, Science, and Music), and about the first of August (for Medicine and Science). A special Ceremonial is usually held about the beginning of November (chiefly for Degrees in Medicine).

Graduates must appear on these occasions in Academic Costume.

ACADEMIC COSTUME.[1]

Chancellor.—Robe of Black Brocaded Satin, trimmed with Gold Lace, and with Gold Frogs down fronts and on sleeves. Black Silk Velvet Trencher, with Gold Button and Tassel.

Vice-Chancellor.—Robe and Trencher same as Chancellor's, but trimmed with Silver in place of Gold.

Rector.—Black Silk Gown, with Crimson Silk Velvet sleeves. The gown is trimmed round the collar and down the front edges with Broad Gold Lace, and the sleeves round bottom with a narrower Gold Lace. Black Silk Velvet Trencher, with Gold Button and Tassel.

Principal.—Mauve Corded Silk Robe trimmed with Velvet to match. Black Silk Velvet Trencher, with Gold Button and Tassel.

Members of University Court.—Black Silk Robe, open sleeve, with Gold Frog on each sleeve.

With all of the above, Hoods appropriate to the Degree are worn.

The ordinary form of Gowns worn by Graduates of the University is the same in all the Faculties—viz., black silk or stuff, with long sleeves. The distinctive part of the costume is in the *Hood* appropriated to each Faculty. These Hoods are as follow:

LL.D.—Black *cloth*, lined with *blue* silk.

LL.B.—Black *silk*, lined with *blue* silk, bordered with white fur.

[1] Graduates are requested to appear for Graduation wearing one hood only—viz., the one which indicates the Degree they are about to receive.

B.L.—Black *silk*, edged with *blue* silk three inches broad, trimmed with white fur.

D.D.—Black *cloth*, lined with *purple* silk.

B.D.—Black *silk*, lined with *purple* silk, bordered with white fur.

M.D.—Black *cloth*, with appended cape, lined and faced with *crimson* silk.

M.B. and C.M.—Black *silk*, lined with *crimson* silk, bordered with white fur.

D.Sc.—Black *cloth*, lined with *green* silk.

B.Sc.—Black *silk*, lined with *green* silk, bordered with white fur.

M.A.—Black *silk*, lined with *white* silk.

D.Litt.—Rich claret *cloth*, with *white* corded silk lining.

D.Phil.—Rich dark blue *cloth*, with *white* corded silk lining.

Mus.Doc.—Rich scarlet *cloth*, with rich *white* corded silk lining.

Mus.Bac.—Scarlet *silk*, with *white* silk lining, edged with *white* fur.

The full Academic Dress for Doctors is a Gown of superfine Scarlet Cloth, loose sleeves, the cape and facings down the front covered, and the sleeves lined, with rich silk of the colour proper to the Degree. Birretum of black silk velvet.

REGULATIONS OF UNIVERSITY COURT.

I.—Absence of Professors.

1. When any Professor shall be prevented from teaching his Class for more than three successive days, an arrangement shall be made for his Class being taught in his absence; and such arrangement shall be intimated to the Dean of his Faculty.

2. When any Professor has reason to expect that the demands of his Profession may involve absence from duty for more than four days in all in the course of a Session, an arrangement similar to that in Regulation 1 shall be made and intimated to the Dean of his Faculty.

3. No arrangement for teaching a Class in absence of the Professor shall continue longer than one week without the sanction of the Senatus Academicus; or, if there be no sufficiently early meeting of the Senatus, without the *interim* sanction of the Principal and Deans Committee.

4. When any Professor shall contemplate an absence from duty of more than one week, it shall be necessary for him to obtain the sanction of the Senatus for such absence, and for the arrangements for teaching his Class; and if his contemplated absence extend to four weeks or upwards, the sanction of the Senatus shall require the confirmation of the University Court.

5. No Professor shall employ any one other than a Colleague or University Assistant to teach his Class for him, without obtaining the sanction of his Faculty; and such sanction shall be communicated to the Senatus at its first meeting thereafter.

6. The Statement of the arrangements for teaching a Class in the absence of the Professor, submitted to the authorities of the University,

shall specify the remuneration proposed to be given to the Professor's Substitute.

II.—Absence of Examiners.

1. Any University Examiner who finds himself prevented from being present at any Examination at which it is his duty to act, shall intimate this to the Dean or other Chairman of his Examining Board, who, on receiving such intimation, or otherwise becoming aware of the absence of the Examiner, shall, if possible, appoint a properly qualified Substitute to act for such Examiner.

2. In every case in which a person is appointed to act as Substitute for a University Examiner, and in which his Faculty, or Examining Committee, shall consider it necessary that the Substitute shall receive remuneration, the rate of remuneration to be paid by the Examiner (whether a Professor or Additional Examiner) to his Substitute shall be fixed by the Faculty, or Examining Committee, and shall be based upon the amount of the Fees payable to the Additional Examiners attached to the Faculty or Examining Committee.

3. All absences of University Examiners, their duration and cause, and the relative arrangements made, shall be immediately reported for approval to the Senatus Academicus by the Chairman of the Board to which the absent Examiner is attached; and a similar Report shall in every case of the absence of a University Examiner be made by the Senatus Academicus to the University Court; provided always that such arrangements shall receive immediate effect when circumstances do not permit the previous approval of the Senatus Academicus to be obtained.

4. In every case in which a Professor shall apply for leave of absence from his duties generally, provision shall be made, under the existing Regulations regarding leave of absence to Professors, for the performance of his duties as Examiner, as well as for the performance of his duties as Teacher; and provision shall be made for the remuneration of his Substitute in both capacities.

III.—Applications for Additional (or Non-Professorial) Examinerships in the University.

1. Applicants should lodge sixteen copies of their applications (one of which should be signed), and sixteen copies of any testimonials they may desire to present, with the Secretary of the Court, not later than one week before the day fixed for making appointments in each case.

2. Applicants who send in testimonials must not send more than four for any one appointment.

3. Persons may be appointed to examine in two of the thirteen Subjects of the Examinations for Graduation in Medicine, but not more, and not in more than one Subject in any one Division of the Examinations.

4. Every applicant for an appointment in Divinity must hold the degree of B.D. from a Scottish University.

Every applicant for an Examinership in Law must be a Bachelor of Laws of a Scottish University.

IV.—Opening of New Classes.

No class in addition to those existing in the University shall at any time be opened,—whether for the purpose of dividing the course on a subject necessary for graduation, or for teaching a class not requisite for graduation,—without the approval of the Senatus and the sanction of the University Court.

V.—Recognition of Extra-Academical Teachers.

1. Every applicant for recognition shall furnish for the information of the Authorities of the University :—

(1.) A Statement of his Registered Qualification or Qualifications, and of the name of the Office, or Appointment (if any) which he holds, as a Teacher of the Subject in which he requests recognition.

(2.) A Syllabus of his Course of Lectures; or, in the case of a Practical Class, information of a similar kind.

(3.) A Statement of the number of Lectures, and of the number of Written or Oral Examinations in the Course; or, in the case of a Practical Class, information of a similar kind.

(4.) A Short Description of his Accommodation for a Class ; and of the Apparatus, Illustrative Specimens, Diagrams, and other appliances, at his disposal for teaching the Subject in which he desires recognition.

(5.) A Statement of his opportunities of studying the Subject, and of the length of time devoted thereto.

(6.) A Statement of the experience he has had in teaching the Subject.

(7.) A Note of the Titles of his published Contributions to the Science of the Subject.

(8.) A Statement as to whether his Course or Courses of Instruction have been already recognised by any University or other examining body, and, if so, what means were adopted for ascertaining his qualifications for teaching.

2. In the case of every Applicant for recognition residing in Edinburgh or its neighbourhood, an inspection shall be made of his teaching Appliances and Accommodation for teaching.

3. Every recognised Extra-Academical Teacher shall annually furnish the University with the information regarding his Course or Courses which is required from the University Professors as to (1.) The number of Students attending the recognised Course or Courses of Instruction ; (2.) The number of meetings for ordinary Class Work in the Session, and in each week thereof; (3.) The number of Special Written Examinations; (4.) The system of conducting the ordinary Class Work, and the number of meetings devoted to each kind of work.

4. The Certificate of Attendance granted to Students by recognised Extra-Academical Teachers, should, in all cases, state the duration of the Course and the number of Meetings for Systematic, Tutorial, and Practical Instruction, respectively; the number of occasions on which attendance was ascertained, and the number of those occasions on which the Student was present; and the number of Class Examinations held during the Course, and whether or not the Student has taken a satisfactory part in the work of the Course, including the Class Examinations, if any. The Certificate should also state the general scope of the Course; and, in particular, in the case of Chemistry, that the Course included Organic as well as Inorganic Chemistry; in the case of Midwifery, that it included the diseases of Women and Children; and, in the case of Practical Materia Medica, that it included Pharmacognosy, Pharmacy, Dispensing, and the writing of Prescriptions.

5. When application is made for the recognition of a Course taught by two or more Teachers in conjunction, information shall be given of the share to be taken by each Teacher in such conjoined Course; and the recognition of such conjoined Courses, and of each of the persons recognised as Teachers of a conjoined Course shall, *ipso facto*, terminate should one or more of the Teachers cease to conduct the Course, or should any material change be made in the share of each Teacher in the teaching of the conjoined Course.

6. The recognition of any Teacher who fails to furnish the information called for in Section 3, or an explanation relative to such failure; or who has ceased for the period of two consecutive Sessions to teach the subject on which he is recognised, shall, *ipso facto*, terminate.

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University Buildings.

THE University Buildings at present consist of: (1) The College, or University (Old) Building, with Dome, in South Bridge Street; (2) The New Buildings (School of Medicine), Teviot Place; and (3) The Music Class Room, Park Place.

I.—THE UNIVERSITY (OLD) BUILDING.

The Old Building, on the site of "Kirk o' Field," the scene of the murder of Darnley, contains the Library and Reading Rooms; the Class Rooms of the Faculties of Arts, Divinity, and Law, the Natural History, and some other Science Class

Rooms; the Theological Library and Reading Room; the Examination Hall; the Physical, and the Geological and Petrological Laboratories; the Fulton Engineering Laboratory; the Physical, Geological, Fine Art, and Natural History Museums; the Senate Hall, University Court Room, and the Offices of the Senatus, the Court, and the Students' Representative Council.

The work of teaching began in 1583, but before the end of the eighteenth century, the professors and students had been very imperfectly housed. In a Memorial, dated 1768, Principal Robertson complains that the buildings, "poor in themselves, seem not to have been carried on according to any regular plan, such as takes place in other academical structures which have been erected on more opulent foundations; and hence the whole fabric has a mean, irregular, and contemptible appearance." At that time the number of students was between six and seven hundred, and that of professors twenty-one.

Twenty years later a writer in the "Scots Magazine" complains that "in 1788 the buildings of the University are in the same ruinous condition that they were in in 1768, and the most celebrated University at present in Europe is the worst accommodated." A scheme for rebuilding, often discussed, was now taken up seriously by the Town Council, encouraged by promise of liberal aid from Government. A plan was obtained from Robert Adam, then at the height of his reputation, and the foundation stone of "the New College of Edinburgh" was solemnly laid on 16th November 1789.

Adam's original plans, preserved in the Soane Museum in London, divide the space now occupied by the College buildings into two quadrangles, a smaller to the east, entered as now from South Bridge Street, and a larger beyond it to the west, with a block of academic buildings lying between. This arrangement was doubtless suggested by the rapid rise of the ground from north-east to south-west. Round these two courts there were to be Class Rooms, Museums, a Library, and also houses for the Principal and Professors. The western side of the larger court was to be occupied by a Graduation Hall and

Chapel: and the great quadrangle was to be flanked with corridors, affording communication between the class-rooms. The building, begun chiefly on the eastern and northern sides, was, however, soon stopped by the death of the architect in 1792, and by failure of funds. In 1815 a Government Commission was appointed to collect funds and to carry out the undertaking, though in a modified form. They invited plans "for finishing the College of Edinburgh, on a reduced scale, leaving out the south front, and the cross building, which formed the small court in the original plan,—regard being always had to the part already executed, and to the preservation of the architecture of Mr Adam, as far as practicable." Out of nine sets of plans sent in, those of William Henry Playfair were selected, and under his superintendence the work was practically completed in 1828, at a total cost of about £161,000.

The general character of the whole design is due to Robert Adam. Some portions were erected by him, or completed after his death from his drawings. In other parts some modification of his plans and elevations was necessary, while a third portion had to be designed anew by Playfair, who was careful to conform to Mr Adam's design. The handsome eastern façade, with its monolithic columns 22 feet in height, was erected by Adam, who intended to have embellished it with a certain amount of sculpture. He also erected the north-west corner of the great court, of which the circular Loggie form an admired feature, carried out part of the north side, and began the western block. Playfair threw the two courts into one, and designed the north and south interior elevations anew. In the western block he adhered to Adam's designs; but the interior treatment of the block, fitted up for the Natural History Museums, is his own; and the "Upper Museum," now the Natural History Laboratory, is a good specimen of his style. The "circular corners" designed by Adam for his great court were retained by Playfair for his single quadrangle. On the exterior, the north front is Adam's, and its plainness is due to the fact that only a narrow lane instead of the broad Chambers Street then bounded the College on that side. Adam's hand-

some design for the south front was simplified by Playfair, but is still superior to the north elevation.

The difficulty of the levels in the quadrangle was satisfactorily overcome by Playfair by surrounding the court with a terrace, which affords a suitable architectural base for the noble buildings rising above it. But Playfair's great achievement is the Library Hall, a fine gallery 185 feet by 54 feet, with an arched ceiling enriched with cassettes, but inadequately lighted.

The general effect of the buildings is simple and dignified. The material is mainly Craigleith stone, and the detail carving is well worked out. The single quadrangle, measuring 242 feet 6 inches from east to west, by 134 feet from north to south, is a great improvement on the original plan of 1789, though the essentials of the design are due to Adam. The interior elevations of the quadrangle, especially on the west, and the eastern front to South Bridge Street, may safely be pronounced excellent specimens of the neo-classic style.

The Dome.

Adam's original design provided for a Dome over the eastern portal, but as his sketch was not very pleasing, no steps were taken to carry out this feature until 1883, when funds came into the possession of the University, bequeathed for this purpose by Robert Cox, Esq., W.S. It was then determined to carry out the Dome on a new design by R. Rowand Anderson, LL.D., Architect of the University New Buildings (School of Medicine). The present Dome, though less purely classical than the Adam-Playfair building, is pleasing and effective. An admirable finial is formed by a vigorous and athletic figure of Youth, bearing the torch of Knowledge, executed in bronze by John Hutchison, Esq., R.S.A. The Dome now contains the Fine Art Museum.

II.—THE UNIVERSITY NEW BUILDINGS.

(SCHOOL OF MEDICINE.)

In 1869 the number of students had risen to fifteen hundred, and that of the Professors to thirty-three, while there were seventeen Class Rooms only for their use. A Committee was

therefore formed in 1873, and an appeal was made to the public for subscriptions for the purchase of a site for and the erection of complete Class Rooms, Theatres, Laboratories, and Museums for the Faculty of Medicine ; for reorganising the Class Rooms in the Old Building for the Faculties of Arts, Divinity, and Law ; for providing better accommodation for the Library ; for erecting a Hall for examinations and academic ceremonials ; and for improving the north front of the College building.

This appeal to the public yielded a sum of £148,548, 2s. 5d., which, with a grant of £80,000 from Government, and interest, rents, &c., amounted to £244,587, 4s. 8d.

These buildings (the University New Buildings, begun in 1878) were partly opened for teaching purposes in October 1880, and after their completion, were transferred by the Committee to the University in October 1888. They are situated on a site formerly covered by Teviot Row, Park Street, and Park Place, and were designed by R. Rowand Anderson, LL.D., Architect, and completed under his supervision.

They contain the Lecture Rooms, &c., of the Faculty of Medicine (excepting those of Botany and Natural History), the Museums of Practice of Physic, Anatomy, Chemistry, Obstetrics, Materia Medica, and Surgery ; a Students' Reading Room, Students' Common Room, Faculty of Medicine Reception and Reading Rooms, and Office of the Faculty.

The style of architecture is Italian of the Cinque-Cento period, intermediate between the Gothic and the stiff Palladian work, which aims at a mere manipulation of the five orders. The main frontage presents a slightly projecting elevation, pierced by the archway which forms the principal entrance. Over the arch is an ornate window, flanked by pilasters, between which are niches for statuary ; and the whole is surmounted by a bold semi-circular pediment, intended to be occupied with sculpture. The façade is three storeys in height except in the projecting west wing, which has an additional floor. On the ground floor the windows are square. Above these runs a well-marked string-course ornamented with dentils. The first-floor windows are round-headed and furnished with architraves. Next comes a broad frieze,

relieved at intervals with circular panels. Over this the string-course is repeated ; and the upper-floor windows are separated by pilasters, and divided by shafts supporting circular tracery. The wall is finished at the top with architrave, frieze, and cornice, and crowned with a low-pitched roof. The external features have of course been influenced by the internal arrangements.

THE M'EWAN HALL.

The building which completes the group of the University New Buildings, or School of Medicine, is the M'Ewan Hall, the munificent gift of William M'Ewan, Esq., M.P., Edinburgh. Dr R. Rowand Anderson was also the architect of this building, which stands on the ground formerly occupied by Park Street. The Greek Theatre forms the basis of the design. The longer diameter of the semicircle is 134 ft. ; the shorter, including the platform recess, is 107 ft. ; and the total height is 90 ft. At the north-west corner, and connecting the Hall with the present buildings, is to be erected the Campanile, 32 ft. square at the base, and rising to a height of 275 ft. At the south-west corner is the entrance to the principal staircase, and on the outer circumference of the circle are two double staircases for access to the galleries. No fewer than seven entrances to the Hall are provided. One of the chief of these is in the base of the tower. The Hall is capable of holding 3000 people, and will be used for Examinations, Academic Ceremonials, Concerts, etc. A large platform and ample floor space and galleries have accordingly been provided, and a great organ is to be erected over the platform. The platform is placed on the straight (west) side of the Hall, and has seats for the Chancellor, the Rector, the Principal, the University Court, the Senatus, the Curators, &c. The roof is domical in form, deeply panelled, pierced with circular lights, and has in the centre a skylight 25 feet in diameter. It is constructed entirely of steel. The external elevation conforms to the early Italian of the rest of the buildings. The great circle of the Hall is divided vertically by powerful buttresses, while horizontally the lines correspond with those of the west façade. The elevation is divided into three

stages ; the first panelled with circular lights, the second a blank wall, while the third stage is arcaded. On the two principal stages the buttresses have niches for figures. The wall is surmounted by a cornice and balustraded parapet, above this appears the clerestory, and over all rises the domical roof. The Hall was begun in 1889, and will probably be completed in 1897.

III.—REID SCHOOL OF MUSIC.

The School of Music, situated immediately to the south-east of the University New Buildings, was built in 1858, from the designs of the late David Cousin. It contains the Music Class Room, with an organ of four manuals and sixty-six stops, in a handsome carved oak case ; and a Museum of interesting acoustic and antique musical instruments.

The architecture of the building is in the Italian Renaissance style of the early part of the sixteenth century.

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University Library.

LIBRARY COMMITTEE.

THE Library Committee consists of not more than seven members, not being members of the Senatus, appointed by the University Court, and of such number appointed by the Senatus as shall be double the number appointed by the Court. The Committee is charged with the superintendence of the Library, and of any libraries acquired, or to be acquired, for the use of the University. The members of the Committee are appointed by the University Court and the Senatus respectively at their first meeting in the Winter Session.

Principal Sir WILLIAM MUIR,
Sir THOMAS CLARK, Bart., } *Chairmen.*

Professor EGGELING,
J. BURGESS, C.I.E., LL.D., } *Conveners.*

Rev. J. Sutherland Black, LL.D.; Professor Crum Brown ; James Taylor Brown, Esq., LL.D.; Professor Chrystal ; James Colston, Esq.;

Professor Copeland ; Professor Cossar Ewart ; Professor Flint ; Professor Hardie ; Rev. Edward F. Hœrnle, M.B.; Professor Kirkpatrick ; Professor Niecks ; J. Balfour Paul, Esq.; Professor Prothero ; Professor Rutherford ; Professor Saintsbury ; Professor Simpson ; Professor Tait.

In 1580 Mr Clement Littil or Little left his books to "Edinbvrgh and Kirk of God thair to reman." This collection of about 300 volumes, chiefly theological (see list in Miscellany of the Maitland Club, vol. i., 1834), was transferred by the Town Council to the University, and became the nucleus of the University Library, which was gradually augmented by donations from citizens of Edinburgh and alumni of the University, and by the contributions of graduates.

The celebrated Poet, Drummond of Hawthornden, bequeathed his library to the University in 1627—a valuable gift, both from the eminence of the donor, and the rare specimens of early literature it embraces (see *Auctarium Bibliothecæ Edinburgenæ*, 1627).

Among noteworthy donors are Principal Adamson ; Dr Robert Johnston, a physician in London ; the Rev. James Nairne of Wemyss, in Fife; Dr John Stevenson, Professor of Logic and Metaphysics in the University; and Dr William Thomson, Professor of Anatomy in the University of Oxford. In 1872, Mr J. O. Halliwell, the eminent Shakespearean critic, presented his very valuable collection of works relating to Shakespeare. In 1875 a large collection of Persian and Arabic MSS. was presented by Mr J. B. Baillie of Leys ; in 1879 an extensive collection of MSS. was received from the executors of David Laing, LL.D. ; in 1880 the works on Economic Science collected by Professor Hodgson were presented by Mrs Hodgson ; in 1882 valuable works on Sanskrit Literature were presented by the family of Dr John Muir ; and in 1886 Mr Thomas Stratton bequeathed 110 works bearing on the study of Celtic In 1889 Mr William Mackinnon, Balmakill, purchased the library of Dr Cameron of Brodick, an eminent Celtic scholar, for £600, and presented them to the University ; and the same year the Library received a collection of MS. Shakespeariana from Mr Halliwell-Phillipps, and a number of books belonging to the late Professor

Wilson, from Mrs Wilson. A "Lorimer Collection," in memory of the late Professor Lorimer, was presented by his son-in-law, Sir David P. Chalmers. In 1895 Professor Blackie left to the Library his collection of modern Greek books; and important additions were obtained from the Goodsir bequest, and from Major Sprot, as representative of the late Dr Cleghorn of Strathvithie.

The Library contains about 191,000 printed volumes, and about 7500 MSS., many of which are of great value.

The University also possesses a number of valuable pictures and busts, which adorn the Library and the Senate Hall.

The Library Hall, and the suite of rooms connected with it, occupy the south side of the quadrangle (Old Buildings).

In 1895 the following Library Regulations were laid down by Ordinance (No. 64):—

I. The Librarian shall have the ordinary management of the Library of the University, subject to the superintendence of the Library Committee appointed under the provisions of Ordinance No. 2 [St Andrews, Aberdeen, and Edinburgh, No. 1,—Libraries and Museums].

II. The Librarian, and such Assistant-Librarians as the University Court, on the report of the Library Committee, may think necessary, shall be appointed by the University Court. The University Court shall also have the power of suspending or dismissing such Librarian and Assistant-Librarians.

III. All books ordered for the Library by the Library Committee shall be sent direct to the Librarian, and all books received by him shall be forthwith catalogued by him in such manner as the Library Committee may direct, and stamped with the Library stamp; and no person shall be allowed to use or borrow any book until it has been entered in the catalogue and stamped.

IV. The Librarian shall, with the approval of the Library Committee, from time to time prepare a list of such books, manuscripts, and other works as cannot, in consequence of any deed of gift or otherwise, be lent out of the Library; and the Library Committee shall from time to time make such regulations as they shall think expedient for allowing access to such works for consultation.

V. Manuscripts, rare books, works of reference, and such other works as the Library Committee shall determine, shall not be lent out of the Library, except under regulations to be made by the Library Committee and approved by the Senatus Academicus and the University Court; and, in addition to such general regulations, the Library Committee may, in each individual case of borrowing such works, impose such special conditions as they may think necessary or expedient: Provided always that every such special permission and all such additional conditions imposed by the Library Committee shall be entered in the Minute-Book of the Committee.

VI. It shall be in the power of the Librarian at any time to withdraw any work from circulation, subject to appeal to the Library Committee.

VII. It shall be in the power of the University Court, after consultation with the Senatus Academicus, and on the report of the Library Committee, to sell or exchange such works as they consider it in the best interests of the Library to dispose of.

VIII. A general inspection of the Library shall take place at such times and during such periods as the University Court, on the report of the Library Committee, shall determine, and all works whatsoever, and by whomsoever borrowed, shall be returned to the Library before the commencement of such periods, under a penalty previously fixed and publicly notified by the University Court.

IX. The Library Committee shall frame regulations to be approved by the University Court, under which the persons hereinafter mentioned may respectively borrow or consult books. Such regulations shall prescribe, *inter alia*, (*a*) the number of books which the said persons shall be entitled to borrow; (*b*) the period for which they shall be allowed to retain them; (*c*) the penalties to be imposed in the event of their failure to return books in due time, or in the event of books being lost or injured.

The persons entitled to borrow books shall be :—

1. Members of the Senatus Academicus and University Lecturers.
2. University Assistants and Examiners.
3. The Librarian and Assistant-Librarians.
4. Matriculated Students.
5. Extra-academical Teachers, recognised by the University Court, in the town in which the University is situated.
6. Students enrolled in any Scottish University as attending the lectures of extra-academical teachers in the town in which the University is situated, and who are already entitled by Ordinance to the use of the Library.
7. Persons who have retired or who shall hereafter retire from the office of Principal or Professor.
8. Members of the University Court.
9. Members of the General Council.

Provided that no member of the University Court or of the General Council shall be entitled to obtain from the University Library books required by the Teachers or Students of the University in the prosecution of academic work and research, and that it shall be in the discretion of the Librarian, subject to appeal to the Library Committee, to decide from time to time what books are so required.

In fixing the number of books to be borrowed by the aforementioned persons respectively, due regard shall be had to the preferable claims of those engaged in teaching and studying in the University.

X. Members of the General Council shall be required, as a condition of exercising the privilege of borrowing books, to pay such subscription as the University Court shall fix from time to time.

XI. The University Court shall determine what sum, if any, shall be deposited by those entitled to borrow books.

XII. The Library Committee, with the approval of the University Court, may admit to the use of the Library, upon such conditions as to subscription and otherwise as they may require, members of the General Council of other Scottish Universities and Graduates of the University who, by reason of being under the age of twenty-one years, are not qualified to be members of the General Council.

XIII. It shall be in the power of the Library Committee from time to time to grant

the use of the Library to such extent and on such conditions as they shall think expedient to persons who may not be members of the University, for purposes of literary research, and the names of those privileged readers shall be reported annually to the University Court.

XIV. So long as any Library subscription or any fine incurred remains unpaid, and so long as any person continues in possession of a book which he is not entitled to retain, the right of the defaulter to the use of the Library shall be suspended and remain in abeyance.

XV. The Library Committee shall, in an annual report to the Senatus Academicus, furnish information as to :

1. The state in which the borrowing registers are kept, and whether there is in use any finding list or other means for facilitating the recall of books.
2. The condition of the various catalogues, whether they are brought up to date or not; the amount of arrears, if any, of the cataloguing of the titles of current acquisitions; and what portions of the Library, if any, remain uncatalogued.
3. The amount of money spent in the purchase of books and periodicals respectively, and how the expenditure has been distributed among the several departments of literature and science.

XVI. At such time as shall be fixed by the Senatus Academicus the Librarian shall report to the Senatus in reference to the year then ended :

1. The particulars of every case of admission to special reading privileges.
2. The particulars of every case in which the right to the use of the Library has been suspended or is in abeyance.
3. Every case in which a book belonging to the Library has been replaced at the expense of a borrower.
4. The titles of all books belonging to the Library, known to have been lost or seriously injured, or found at the time of inspection to be amissing.
5. The titles of all books entered as missing in previous reports which have been recovered.
6. The number of accessions to the Library acquired by purchase and received in donation respectively.
7. Any other matter which the Librarian may think it of importance to bring under the notice of the Senatus Academicus, or which he may be directed by the Library Committee to report.

The Senatus Academicus shall forward the report to the University Court.

The following Regulations are at present in force :—

I. The Library is open for giving out Books to Readers, on loan or for reference, every lawful day during the Winter Session, from Ten to Four, Saturdays, Ten to One ; and during the Summer Session and Autumn from Ten to Three, Saturdays Ten to Twelve ; except in August, the Christmas vacation, and the week in which the Spring Holiday occurs, when the Library

(not the Reading-Rooms) is open from Ten to One, except on Saturdays and holidays, viz. :—the Queen's Birthday, Christmas Day, New Year's Day, Good Friday, and the Edinburgh Spring and Autumn Holidays. The Students' Reading-Rooms are open daily during the Winter Session from Ten to Four, and Eight to Ten P.M. ; Saturdays Ten to One.

II. Each Member of Senatus, and each University Lecturer, may have at one time twenty-five volumes at most.

III. Each University Assistant may have at one time ten volumes, and not more.

IV. Each University Examiner may have five volumes, and not more.

V. The Librarian may have at one time ten volumes, and not more ; and each Assistant-Librarian four volumes, and not more : Provided books borrowed by the Librarian, or by any Assistant-Librarian, are entered in the Library Books, in the same manner as books borrowed by other persons.

VI. (1) Every Matriculated Student may have two volumes at one time, and may retain any book for two weeks ; and may re-borrow any book for successive periods of two weeks, unless applied for by another person. In exceptional cases Students may be allowed by the Library Committee to take out more than two volumes at a time : Provided that every Student, before borrowing books, must exhibit his Matriculation Ticket, and at least one Professor's Ticket, and deposit £1 at the Matriculation Office, after which his name will be enrolled in the Library books. (2) No certificate of attendance on a class may be granted by a Professor to any Student without production of evidence that the Student has duly returned all books he has borrowed from the Library.

VII. Each extra-academical teacher, recognised by the University Court, is entitled, on paying an annual subscription of ten shillings and sixpence, to take out five volumes, and not more.

VIII. Each Student enrolled as attending an extra-academical teacher in Edinburgh (under Ordinance No. 16, Edinburgh, No. 1, Section VIII., Sub-section 5) has the same Library privileges as a matriculated Student ; and no certificate

of attendance on the lectures of such teacher may be given to any Student without production of evidence that the Student has duly returned all books he has borrowed from the Library.

IX. Each person who has retired from the office of Principal or Professor is entitled to take out ten volumes, and not more.

X. Each Member of the University Court and of the Library Committee is entitled to take out ten volumes, and not more.

XI. Each Member of the General Council is, in each year on paying ten shillings and sixpence to the Library, entitled to take out four volumes at a time ; and a payment of five guineas, instead of such yearly subscription, entitles him to the like privilege for life. The year is held to date from the day on which the subscription is paid, as recorded on the reader's ticket and in the Library Books.

XII. In consideration of the annual payment of five pounds by the Royal College of Surgeons to the University, each Fellow of the College resident within ten miles of Edinburgh, is, in each year in which he pays a subscription of one guinea to the Library, entitled to take out ten volumes.

XIII. Subject to the provision as to the return of books at the annual inspection, every person in each of the above classes is entitled to retain each book for one month from the date of borrowing, if the book has been borrowed between the *first day of October* and the *thirtieth day of April inclusive*, and for two months from the date of borrowing, if the book has been borrowed between the *first day of May* and the *thirtieth day of September inclusive*, except in so far as the special rules as given above are applicable ; and further, after the expiration of such period of one month or of two months, as the case may be, he may retain each book until the annual inspection in October, unless notice is received by him requiring the return of such book. The form of notice requires the return of the book within a certain period to be specified therein, under penalty of not less than one shilling a volume, if the book be not returned within such period ; and after the expiration thereof, under a further penalty of sixpence a volume for each day, as long as the book is not returned, until the amount of the

fine exceeds the sum for which the book can be replaced. Such penalties to be also specified in such notice.

XIV. A general Inspection of the Library, and of the record of borrowing and returning books, takes place (as above provided by Section VIII.) *annually in the first week of October.*

XV. During the annual Inspection, the Library is closed, and all works must be returned before the beginning of such period, under a penalty of not less than one shilling a volume ; and in the event of any volume not being returned before the expiration of one week after the last day of the inspection, the fine is repeated weekly until such volume is returned, or until a copy of the work of equal value is, at the expense of the borrower, placed in the Library in its stead. The amount of the fine, in the case of works borrowed by special permission, may be fixed either by general regulation of the University Court, or by special condition imposed by the Library Committee.

READING ROOMS.

I. Old Buildings.

A separate collection of books is set apart for the use of Students.

Those wishing to consult books must insert in one of the slips provided for the purpose their Matriculation Number, Name and Residence, and the title of the Book, and present the slip to the Librarian in attendance.

Each slip will render the person who has signed it responsible for the book named. The counterfoil of the slip should, therefore, be reclaimed from the Librarian when the Book is returned, or whenever the Book applied for is not available.

Every volume must be returned by the borrower before leaving the Reading Room. Students are forbidden to leave the Books on the table ; they are required to hand them to the Librarian, and to get back the counterfoils. To prevent confusion, this should be done a few minutes before the close of each hour by those about to attend classes.

Besides the books in the Reading Room, each Student may consult in the Reading Room Two Volumes daily from the General Library: Provided he has handed in slips applying for them on the previous day, before 2 P.M. To such books the same rules will apply as to those consulted from the Reading Room.

No conversation or noise is permitted in the Reading Room.

The Librarian is responsible for the management of the Reading Room. Any difficulty that may arise must be referred to him, or, if necessary, through him to the Library Committee.

Students, on first applying for books in the Reading Room, must exhibit their Matriculation Tickets.

All books taken into the Room from the General Library shall be examined and returned to their place in the General Library each day. No books shall be issued from the General Library, for use in the Reading-Room, after 3.20 in Winter or 2.30 in Summer; and all books from the General Library shall be given up in the Reading-Room at 3.45 in Winter and 2.45 in Summer.

The Reading-Room is open daily during the Winter Session from 10 to 4 and from 8 to 10 P.M., and is available for either men or women Students. Books required from the General Library must be demanded in writing before 3 o'clock.

A Special Reading-Room is set apart for women students.

II. New Buildings.

In the New Buildings is a Students' Reading-Room containing Books of Reference for those attending the Classes in the Faculty of Medicine. The Regulations as to consulting Books are similar to those in the Reading-Room in the Old Buildings. See p. 58. It is open daily, from 9 A.M. to 5 P.M.; Saturdays, 10 to 12. It is open in September and during the week in which the Spring Holiday occurs (Saturday excepted), from Ten to One. It is closed during August and the Christmas Vacation, and on holidays and Saturdays during the Summer Vacations.

THEOLOGICAL LIBRARY.

This Library, founded in 1698 for Students in Theology, contains above 10,000 volumes. The management is vested in six Curators, chosen by ballot by the "Cives" of the Library from their own number. Students of Divinity of this or other Scottish University are admitted as Cives on paying: the former, two shillings and sixpence; the latter, five shillings, per annum. No one who, when a Student of Divinity in this University, failed to enter as a Civis, may afterwards do so until he has paid up the arrears of two shillings and sixpence for each year of his Theological Course in which he failed to pay. No Civis can be elected a Curator unless at least in the second year of his attendance at the Divinity Hall. The election takes place in the second week of December, one-third of the Curators going out annually by rotation. The Curators elect one of their own number to be Treasurer. The Curators and Treasurer report the state of the funds, &c., to the Cives, the Theological Faculty, and the Senatus. The books purchased are selected by the Curators, subject to the approval of the Faculty of Divinity. The Professor of Divinity, who is *ex officio* Honorary Librarian, annually appoints an acting Librarian. Books may not be kept out of the Library longer than two months.

PORTRAITS AND BUSTS IN THE SENATE HALL, LIBRARY, COURT ROOM, ANATOMICAL MUSEUM, MUSIC CLASS ROOM, AND DOME.[1]

I. Portraits.

There are twenty-seven Portraits of Benefactors, Principals, Professors, and others, by Raeburn, Sir John Watson Gordon, and other Artists, in the Senate Hall, four in the Library, sixteen in the University Court Room, and one in the Music Class Room.

[1] There is a separate printed Catalogue of the Portraits and Busts in the University, and of the Torrie Collection. A detailed Catalogue will also be found in the Calendar for 1890-91, p. 61, as well as in the previous Calendars.

Portraits presented since 1890.

In Senate Hall.

James Lorimer, M.A., LL.D., Dr Jur., Professor of Public Law (1862-1890).

Joseph Black, M.D., Professor of Chemistry and Medicine (1766-1795).

In Court Room.

General Sir Joseph Straton, Benefactor of the University.

II. Busts.

There are forty Busts in the Upper Library Hall, two in the Anatomical Museum, and one in Room in Dome.

In order to honour and perpetuate the names of Benefactors who have founded Scholarships, Bursaries, or new Chairs in the University, the University authorities have made arrangements for placing their Busts or Portraits in the Library and University Court Room.

Regarding as Benefactors the eminent Professors who have elevated the character of the University by their writings or discoveries, the University desires to procure Portraits or Busts of James and David Gregory, Colin Maclaurin, Matthew Stewart, Dr Cullen, Dr James Gregory, Dr Alison, Dr Chalmers, Sir Chas. Bell, Lord Woodhouselee, Dr Thos. Chas. Hope, Professors Ross, Macdougall, Muirhead, Sellar and Campbell Fraser.

Busts presented since 1890.

In Library Hall.

Rt. Hon. John Inglis, D.C.L., LL.D., Lord Justice-General, Chancellor of the University (1868-1891).

John Rae, M.D., LL.D., Arctic Explorer.

James Miller, M.D., LL.D., F.R.S.E., &c., Professor of Surgery in the University (1842-64).

John Goodsir, F.R.S., Professor of Anatomy in the University (1846-1867), bequeathed by his brother, Dr Robert Goodsir.

TORRIE FINE ART COLLECTION.

Sir James Erskine of Torrie, by a Will, dated April 1834, bequeathed to the University his Pictures, Bronzes, and Marbles, "for the purpose of laying a foundation for a Gallery for the encouragement of the Fine Arts." The collection is at present temporarily deposited in the National Gallery until funds can be obtained for its suitable display in the College, and for carrying more fully into effect the intentions of the testator.

The Pictures, forty-five in number, include choice specimens of the works of different Masters, especially in the Flemish and Dutch Schools. The Marbles, seventeen in number, and twenty-three Bronzes, have been chosen with a correct appreciation of the merits of this department, and the whole collection reflects credit on the taste and public spirit of Sir James Erskine.

Museums.

A MUSEUM COMMITTEE, consisting of three members, not being members of the Senatus, appointed by the University Court, and of six appointed by the Senatus, is charged with the superintendence of all Museums belonging to the University, and of any collections, furniture, or apparatus, or objects acquired for the use of the University or of any class therein. The members are appointed by the University Court and Senatus respectively at their first meeting in the Winter Session of each year.

Members of Committee appointed by the University Court.

Sir James Alexander Russell, M.A., M.B., C.M., B.Sc. ; Patrick Heron Watson, M.D. ; John Duncan, M.D.

Appointed by the Senatus Academicus.

Professors Tait, Geikie, Fraser, Greenfield, Sir William Turner, Rutherford.

Of the following Museums several belong partly or wholly to the Professors of the respective subjects :—

1. NATURAL PHILOSOPHY MUSEUM. A large and very valuable collection of physical apparatus, chiefly modern.

2. MUSIC AND MUSICAL INSTRUMENTS.—A very interesting and valuable collection of acoustic and musical instruments.

3. GEOLOGICAL MUSEUM.—For class purposes, showing the characters of minerals and rocks, and the typical fossils of the different geological systems.

4. FINE ART MUSEUM.—A small collection of casts, photographs, and drawings, in the Dome above the portal, illustrating the main points in the history of classical art.

5. MUSEUM OF THE ROYAL BOTANIC GARDEN. — This Museum is open to Students.

6. PHYSIOLOGICAL MUSEUM.—A large collection of Physiological Instruments, Microscopes and Microscopical Appliances, Diagrams, and Preparations, partly belonging to the Professor.

7. PRACTICE OF PHYSIC MUSEUM.—Pathological specimens, drawings, models, diagrams, etc., the property of the Professor.

8. Anatomical Museum.—Founded in 1800 by Dr Monro, *secundus*, who presented his own Anatomical Collection, and that of his father, to the University, "to be used by his successors for the purpose of demonstrating and explaining to the Students the structure, physiology, and diseases of the human body." In 1859, Sir David Monro, M.D., presented a collection of anatomical preparations, formed by his father, Dr Alexander Monro, *tertius*. Numerous additions were also made by Professor Goodsir, especially in the department of Comparative Anatomy, on whose death the Senatus purchased his Private Museum, and added it to the Collection. The Museum now contains several thousand specimens in illustration of Human Anatomy, both normal and pathological, and of Comparative Anatomy.

The Conservator will gratefully receive contributions of rare and interesting specimens from Graduates and former Students. He is especially desirous of making the collection thoroughly representative of the osteology of the different Races of Men.

The Collection was transferred in 1884-5 to the University New Buildings in Teviot Place, where it is arranged in a large and handsome Hall with two galleries. It is open at certain hours to all matriculated students. The pathological collection occupies the upper gallery. The spirit-preparations in illustration of normal Human and Comparative Anatomy are arranged in the lower gallery. The osteological collection is disposed in the cases on the floor, and suspended in the centre of the Hall. In 1887 the Henderson Trustees committed to the custody of the Conservator their valuable collection of crania and casts.

Conservator of the Museum, the Professor of Anatomy; Assistant-Conservator, Mr James Simpson.

9. Chemistry Museum. Professor (afterwards Sir Lyon, now Lord) Playfair, on his resignation of the Chair of Chemistry, presented to the University the chemical substances he had used in illustrating his lectures. The collection has been increased by gifts from chemical manufacturers and others, and by substances prepared in the University Laboratory.

10. The Obstetrical Museum, besides a few preparations left by Professor Hamilton, contains instruments, preparations, models, and diagrams, collected by Sir James Y. Simpson, and added to by the present Professor of Midwifery, to whom they belong.

11. The Museum of Natural History.—The old Museum, established in 1812 in the University, contained Zoological, Geological, and Mineralogical Collections, formed chiefly by Professor Jameson, for fifty years Professor of Natural History and Regius Keeper of the Museum. In 1854 it was transferred by the Town Council, then the Patrons of the University, to Government, and removed to the Natural History Department of the New Museum of Science and Art, where it is still accessible to Students of Natural History and Geology.

A Zoological Museum is now being formed in the University. Graduates and others interested will greatly aid in this important undertaking by presenting specimens to the Keeper—the Professor of Natural History.

12. Materia Medica Museum.—One of the most complete collections of medicinal and food substances in this country, founded by Professor Andrew Duncan. His successor, Sir Robert Christison, added many valuable specimens, mounted for the most part by himself with singular neatness. The present Professor has made extensive additions. The Museum has been greatly enriched by interesting donations from former members of the Class in all parts of the world. There is also a Students' Reading Museum, containing specimens of the medicinal substances used in this country, formed and arranged by the present Professor.

13. Surgical Museum.—This collection, formed by Professor Spence, has been largely extended by the present Professor, to whom it belongs. Many additions have been made, both of pathological preparations and of plaster and gelatine casts, illustrative of Surgical Anatomy and Pathology. A complete catalogue may, on application, be consulted by practitioners of medicine.

ROYAL BOTANIC GARDEN AND ARBORETUM.

The Royal Botanic Garden, Inverleith Row, is connected with the University, in so far as the Professor of Botany delivers his Lectures in the Hall in the Garden.

The Garden is open daily. Specimens of plants for study are supplied to Students so far as practicable.

The Botanical Museum in the Garden is open to Students daily, and the University Herbarium, which is placed in the Garden, may be consulted between 10 and 1, and 2 and 5, under the direction of the Professor or the Curator.

The Botanical Laboratory in the Garden is open daily for work and original research.

Faculty of Arts.

Dean.—PROFESSOR CHRYSTAL, LL.D.

Students who do not intend to graduate in Arts may attend any of the Classes on payment of the Matriculation and the Class Fees, without having passed any Preliminary Examination. Those who intend to graduate must pass the Preliminary Examination. The Classes in the Faculty are now open to Women, except a few in which provision has not yet been made for teaching them. Provision has, however, been made to admit Women to Graduation in Arts who have received the requisite instruction at certain Extra-Academic Schools in Edinburgh in the subjects in which classes are not open to them in the University.

The classes will be opened as follows, and will meet daily (Saturdays excepted), unless otherwise stated. They will meet for the last time before the Christmas vacation on Friday, 18th December: will re-assemble on Tuesday, 5th January 1897, and will be closed on Friday, 26th March 1897. The Annual Graduation Ceremonial in Arts, &c., will be held on Saturday, 10th April 1897.

Programme of Classes.

WINTER SESSION, 1896-97.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
I.—DEPARTMENT OF LANGUAGE AND LITERATURE.			£ s.
Junior Latin	13 Oct., 9 o'cl. & also on Mon. & Wed. 11 o'cl.	Prof. Hardie	3 3
Senior Latin[2]	13 Oct., 10 ,,		3 3
Honours Latin	13 Oct., 12 ,,		3 3
Junior Greek	13 Oct., 10 ,, & also on Tues., Thurs., & Fri., 11 o'cl.	Prof. Butcher	3 3
Senior Greek[2]	13 Oct., 11 o'cl.		3 3
Honours Greek	14 Oct., 10 ,,		3 3
Classical Archæology (Honours Course)	14 Oct., 5[2][3] ,,	Prof. Baldwin Brown	3 3
English	13 Oct., 4 ,,	Prof. Saintsbury	3 3
English Literature (Honours Course)[4]	14 Oct., 2 ,, 6 Jan., 2 ,,		
English Language (Honours Course)[4]	14 Oct., 3 ,, 6 Jan., 3 ,,	G. Gregory Smith, M.A.	3 3
French (Pass)[2]	13 Oct., 3 ,,	Charles Sarolea, Ph.D., D.Litt.	3 3
French (Honours)	14 Oct., 4 ,,		3 3
Italian[5]	14 Oct., 5 ,,		3 3

[1] Fees for second, third, and subsequent attendances, see page 61.

[2] Students who wish to take the Classes of Senior Latin, Senior Greek, French or German, as qualifying for Graduation in Arts, must have previously passed in Latin (Higher Standard), Greek (Higher Standard), French, or German respectively, either as part of their Preliminary Examination or in addition thereto.

[3] The hour may be altered to suit the class.

[4] This Course may be divided into two Half Courses. Fee for each, £2, 2s.

[5] An Honours Course may be given by Dr Sarolea.

WINTER SESSION, 1896-97—*continued.*

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1] £	s.
I.—DEPARTMENT OF LANGUAGE AND LITERATURE—*cont.*				
German (Pass)[2]	13 Oct., 4 o'cl.	Otto Schlapp ...	3	3
German (Honours)[2]	14 Oct., 3 ,,		3	3
Sanskrit (Junior Class)	14 Oct., 3 ,,	Prof. Eggeling	3	3
Do. (Senior Class)[3]	14 Oct., 2 ,,		3	3
Hebrew (Junior Class)	13 Oct., 1 ,,		3	3
Do. (Senior Class)[3]	27 Oct., 2 ,,		3	3
Arabic[3] (*Mon., Wed., & Fri.*)	28 Oct., 3 ,,	Prof. Kennedy..	3	3
Syriac[3] (*Tues. & Thurs.*)	27 Oct., 3 ,,		2	2
Celtic[3]	13 Oct., 4 ,,	Prof. Mackinnon..	2	2
Do. Advanced	19 Oct., 3 ,,		1	1
Gaelic Class	20 Oct., 3 ,,		1	1
II.—DEPARTMENT OF MENTAL PHILOSOPHY.				
Logic & Psychology	13 Oct., 1 o'cl.	Prof. Seth	3	3
Metaphysics and Hist. of Philosophy (Honours Class)...	20 Oct., 3 ,,		2	2[4]
Moral Philosophy	13 Oct., 2 ,,	Prof. Calderwood	3	3
Do. Honours Class...	21 Oct., 3 ,,		2	2[4]
Political Economy[5]...	13 Oct., 5 ,,	Prof. Nicholson...	3	3[5]
Education (Theory, History, & Art of)	14 Oct., 3.10 ,,	Prof. Laurie.....	3	3
Philosophy of Law[6] (45 *Class Meetings*)	15 Oct., 2 ,,	Prof. Sir Ludovic Grant, Bart...	2	2
Natural Theology (Gifford Lectureship).....	Dates will be afterwards announced.	Prof. Tiele, of Leyden	Free.	
III.—DEPARTMENT OF SCIENCE.				
Junior Mathematics...	13 Oct., 12 o'cl.	Prof. Chrystal...	3	3
Senior Mathematics[7]	13 Oct., 9 ,,		3	3
Mathematics, Intermediate Honours..	14 Oct., 11 ,, (*Mon., Wed., Fri.*)		3	3

[1] Fees for second, third, and subsequent attendances, see page 61.

[2] See footnote 2, page 55. Twenty Lectures on German History and Literature may be attended separately. Fee, £1, 1s.

[3] Students who wish to take the Classes of Sanskrit, Hebrew, Arabic, Syriac, or Celtic as qualifying for the M.A. Degree, must have previously passed an Examination in these Languages equivalent in standard to the Examinations in Latin and Greek in the Preliminary Examination.

[4] When taken as a Graduation Course, £3, 3s.

[5] Or two Half-Courses, £2, 2s. each. Course up to Christmas qualifies in Economics for the B.Sc. in Agriculture.

[6] Half-Course.

[7] Students who wish to take the Classes of Senior Mathematics or Natural Philosophy as qualifying for Graduation in Arts, must have previously passed the Intermediate or Higher Standard Examination in Mathematics either as part of their Preliminary Examination or in addition thereto.

WINTER SESSION, 1896-97—*continued.*

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
	III.—DEPARTMENT OF SCIENCE—*continued.*		
			£ s.
Mathematics (Advanced Honours)	14 Oct., 10 o'cl. (*Mon., Wed., Fri.*)	Prof. Chrystal.....	3 3
Natural Philosophy[2]..	13 Oct., 11 ,,	Prof. Tait.....	3 3
Do. (Advanced Honours, *Mon., Wed., Fri.*).....	21 Oct., 12 ,,		3 3
Physical Laboratory..	19 Oct., 10 ,,		2 2
Natural Philosophy (Intermediate Honours, *Mon., Wed., Fri.*).....	14 Oct., 9 ,,	Cargill G. Knott, D.Sc.	3 3
Dynamics, Advanced Science (*Mon., Wed., Fri.*).....	14 Oct., 10 ,,		3 3
Astronomy (*Mon., Tues. Wed. Thurs.*)	13 Oct., 11 ,,	Prof. Copeland..	3 3
Chemistry, with Practical Chemistry	13 Oct., 10 ,,	Prof. Crum	4 4
	1 Dec., 1 & 2 ,,	Brown	3 3
Zoology[3] (Elementary)	13 Oct., 12 ,,	Prof. Ewart....	4 4
Practical Zoology (Elementary).....	13 Oct., 11 ,,		2 2[4]
Advanced Zoological Laboratory.....	... ...		
Morphology of Vertebrates	14 Oct., 2 ,,	J. Beard, D.Sc...	2 2
Botany (Advanced)	13 Oct., 11 ,,	Prof. Balfour..	2 2[5]
Practical Botany (Advanced)	13 Oct., 11 ,,		3 3[5]
Geology.....	13 Oct., 4 ,,	Prof. Geikie...	4 4
Practical Geol. and Min. up to Christmas (Graduation Half-Course)	14 Oct., 2 ,,		2 2

[1] For second, third, and subsequent attendances, see page 61.

[2] See footnote 7, page 56.

[3] With Practical Zoology, a full Course, but the whole Course must extend over at least 75 separate days. Any student whose attendance on the Elementary Course of Lectures and the Elementary Practical Class of Botany or Zoology does not entitle him to a full Certificate for Graduation in Arts, may make up the seventy-five attendances required on separate days, by attending twenty-five Lectures of any other Course in the Botanical or Zoological Department, as the case may be, without additional fee.

[4] Besides charge of 10s. for Laboratory Expenses.

[5] Besides Garden fee of 5s.

WINTER SESSION, 1896-97—*continued.*

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
IV.—DEPARTMENT OF HISTORY AND LAW.			£ s.
History (Honours Course on Wycliffe)	13 Oct., 2 o'cl. (*Mon., Tu., Th.*)	Prof. Kirkpatrick.....	3 3
History (British, especially 1603-1680)	13 Oct., 12 ,,	Prof. Prothero	3 3
History (Honours Course on "The Creation of the British Empire")..	14 Oct., 10 ,,	Prof. Prothero	3 3
Constitutional Law and History[2].....	15 Oct., 5 ,,	Prof. Kirkpatrick	4 4
Roman Law.....	15 Oct., 4 ,,	Prof. Mackintosh....	4 4[3]
History of Roman Law (44 *Class Meetings*).....	... ...	Prof. Mackintosh....	2 2
Ecclesiastical History	27 Oct., 11 ,,	Prof. Taylor.....	3 3
Archæology and Art (History of).....	13 Oct., 3 ,,	Prof. Baldwin Brown	3 3
Classical Archæology (Honours Course, *Mon., Tu., Wed.*)..	14 Oct., 5 ,,	Prof. Baldwin Brown	3 3
Public International Law (45 *Class Meetings*)[4].....	5 Jan., 2 ,,	Prof. Sir Ludovic Grant, Bart.	2 2

SUMMER SESSION, 1897.

The Classes will be opened as follows, and will be closed on Friday, 16th July.

Classes.	Days and Hours.	Profs. and Lecturers.	Class Fees.
I. DEPARTMENT OF LANGUAGE AND LITERATURE.			£ s.
Senior Latin (Graduation Half-Course)[5]	4 May, 9 o'cl.	F. R. Jamieson, M.A.	2 2
Honours Latin (Graduation Half-Course)	4 May, 10 ,,	F. R. Jamieson, M.A.	2 2
Senior Greek (Graduation Half-Course)[5]..	4 May, 10 ,,	A. Douglas Thomson, M.A.	2 2
Honours Greek (Graduation Half-Course)	4 May, 9 ,,	A. Douglas Thomson, M.A.	2 2

[1] For second, third, and subsequent attendances, see page 61.
[2] Full Course, qualifying both for Arts and for Law Graduation, in two distinct Half-Courses.
[3] Fee for Winter Session. For Winter and Summer, £5, 5s.
[4] Half-Course.
[5] See footnote 2, page 55.

SUMMER SESSION, 1897—*continued.*

Classes.	Days and Hours.	Profs. and Lecturers.	Class Fees.[1] £ s. d.
1. DEPARTMENT OF LANGUAGE AND LITERATURE—*continued.*			
English Literature (Honours Graduation Half-Course, *Mon., Wed., & Fri.*)	5 May, 12 o'cl.	G. Gregory Smith, M.A.	2 2 0
Sanskrit	4 May, 3 ,,	Prof. Eggeling	3 3 0
Elementary Hebrew[2]	4 May, 10 ,,	Prof. Kennedy	1 11 6
Elementary Arabic	4 May, 11 ,,	and Assistant.	2 2 0
2. DEPARTMENT OF MENTAL PHILOSOPHY.			
Ancient Philosophy (Honours Graduation Half-Course, *Tues. and Thurs.*)	4 May, 11 o'cl.	R. P. Hardie, M.A.	2 2
Ancient Philosophy Honours Graduation Half-Course, *Mon., Wed., & Fri.*)	5 May, 11 ,,		2 2
Ethics (Honours Graduation Half-Course, *Mon., Wed., Fri.*)	5 May, 12 ,,	Charles Douglas, M.A., D.Sc.	2 2
Psychology (Honours Graduation, Half-Course, *Mon., Wed., Fri.*)	5 May, 11 ,,		2 2
3. DEPARTMENT OF SCIENCE.			
Senior Mathematics (First Graduation Half-Course)[3]	4 May, 11 o'cl.	Chas. Tweedie, M.A., B.Sc.	2 2
Senior Mathematics (Second Graduation Half-Course)[3]	4 May, 12 ,,		2 2
Honours Mathematics (Graduation Half-Course)	4 May, 10 ,,		2 2
Physical Laboratory	4 May, 10 ,,	Prof. Tait and Assistant.	2 2
Physics (*mainly for Students of Medicine*)	4 May, 12 ,,	Prof. Tait.	3 3
Elementary Dynamics	4 May, 9 ,,	C. G. Knott, D.Sc.	2 2

[1] For second, third, and subsequent attendances, see page 61.
[2] To prepare Students for entering the Junior Class in Winter Session.
[3] See footnote 7, page 56.

SUMMER SESSION, 1897—*continued.*

Classes.	Days and Hours.	Profs. and Lecturers.	Class Fees.[1]
	3. DEPARTMENT OF SCIENCE—*continued.*		£ s.
Advanced Experimental Physics	4 May, 10 o'cl.	W. Peddie, D.Sc.	2 2
Practical Chemistry	4 May, 2 ,,	Professor Crum Brown.	3 3
Chemistry (Organic)	4 May, 1 ,,		2 2
Zoology (Elementary)[2]	4 May, 12 ,,	J. Beard, D.Sc.	4 4
Do. (Elem. Pract.)	4 May,[3]		2 2[4]
Invertebrate Zoology	4 May, 2 ,,		2 2
Do. (with Lab. work)			3 3[4]
Advanced Zoology (Comp. Morphol. of Invertebrata and Adv. Lab. Course)	4 May,[3]	Prof. Ewart	3 3[4]
Natural History Labor			6 6[4]
Botany[5]	4 May, 8 ,,		4 4[6]
Practical Botany		Prof. Balfour	
Field Demonstrations on *Saturdays*.	4 May, 9 ,,		2 2[6]
Geology (Graduation Half-Course, *Mon., Wed., Fri.*)	5 May, 4 ,,	Prof. Geikie	3 3
Field Demonstrations *on Saturdays*			

TUTORIAL CLASSES.

Classes.	Days and Hours.	University Assistants.	Class Fees.
			£ s.
Junior Latin (Preliminary Class)	4 May, 12	Francis R. Jamieson, M.A., Lecturer on Latin Literature.	2 2
Junior Greek (Preliminary Class)	4 May, 11	A. Douglas Thomson, M.A., Lecturer on Greek Literature.	2 2
Natural Philosophy (Advanced Honours)	4 May, 9	William Peddie, D.Sc., Lecturer on Natural Philosophy.	2 2
Formal Logic (Preliminary Class, Fifteen Lectures, *Tues. and Thurs.*)	11 May, 12	R. P. Hardie, M.A., Lecturer on Logic and Metaphysics.	1 1

[1] Fees for second, third, and subsequent attendances, see page 61.
[2] See footnote 3, page 57.
[3] At hours to be arranged.
[4] Besides charge of 10s. for Laboratory Expenses.
[5] With Practical Botany a full Course, but the whole Course must extend over 75 separate days. See footnote 3, p. 57.
[6] Besides Garden Fee of 5s.

FEES FOR SECOND, THIRD, AND SUBSEQUENT ATTENDANCES.

1. *Ordinary Graduation Classes*:—(1.) Second attendances on £4, 4s. Courses, £3, 3s.; third or subsequent attendances, £1, 1s. (2.) Second attendances on £3, 3s. Courses, £2, 2s.; third or subsequent attendances, £1, 1s. (3.) Ordinary Celtic Class, if not taken for Graduation, £2, 2s.; second or subsequent attendances, £1, 1s.

2. Second attendances on £2, 2s. Lecture Courses (not being Honours Half-Courses), £1, 11s. 6d.; third or subsequent attendances, £1, 1s.

3. When fee for first attendance is less than £2, 2s., no reduction for second or subsequent attendances.

4. *Honours Courses*:—(1.) *Full Honours* £3, 3s. *Courses*—Second attendances, no reduction; third or subsequent attendances, £2, 2s. (2.) *Half-Honours* £2, 2s. *Courses*—Second attendances, no reduction; third or subsequent attendances, £1, 1s.

5. No reduction for Laboratory or Practical Courses.

For Matriculation Fees, see pages 27 and 28.

The following means are afforded for Practical Instruction:—

LABORATORIES.

The Physical Laboratory, established with the view of affording Students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries, is open daily from 10 to 3, under the superintendence of Professor Tait.

The Royal Observatory is open to Students of Practical Astronomy on Friday evenings from 8 P.M.

The Chemical Laboratories, Zoological Laboratories, Royal Botanic Garden Laboratory, Geological and Petrological Laboratory, see Faculty of Science.

Courses of Lectures.[1]

1896-1897.

I.—DEPARTMENT OF LANGUAGE AND LITERATURE.

HUMANITY—(Latin).

PROFESSOR HARDIE.

Junior Class—Taught by the Assistant, under supervision of the Professor: 9 to 10, five days a week, and Mondays and Wednesdays, 11 to 12. The work of the Class consists of—

[1] The annual amount payable for Matriculation, Class Fees, of the regular Course in Arts and Graduation Fee may be estimated at about £10, 10s

1. Readings of some Latin author, such as Virgil, Horace, Ovid, or Tibullus, Livy, Sallust, and Cicero.
2. Lectures on Roman History or Literature.
3. Exercises in Latin Prose Composition.
4. Translation of passages from Latin into English, and from English into Latin "at sight."
5. Written Examinations.

Books recommended.—Bradley's Arnold's Latin Prose. Allen's Second Latin Exercise Book. Pelham's Outlines of Roman History. Wilkins' Primer of Roman Literature. Wilkins' Primer of Roman Antiquities.

During the Winter Session 1896-97 the following books will be read :—Livy, Bks. IX. and XXIV. ; Cicero, *Pro Plancio;* Virgil, *Æneid*, Bk. VII. ; Horace, *Satires*, Bk. I., *Odes*, Bk. II. ; Sallust, *Jugurtha.*

Senior Class—10 to 11, five days a week.

This is the class which qualifies for the ordinary Degree of M.A.[1] The work of the Class consists of—

1. Readings of some Latin author, such as Virgil, Horace, Cicero (*Letters* or *Speeches*), Tacitus.
2. Lectures on Roman History or Literature.
3. Weekly Exercises in Latin Prose.
4. Translation of Unseen Passages.
5. Written Examinations.
6. Latin Verse Composition (voluntary).

Books recommended. The New Latin Primer (Postgate and Vince) ; Lindsay's Historical Latin Grammar ; Potts' Hints towards Latin Prose Composition ; Pelham's Outlines of Roman History ; Capes' Early Empire ; Cruttwell's History of Latin Literature ; Mackail's Latin Literature ; Rich's Dictionary of Antiquities.

During the Winter Session the following books will be read : —Horace, *Odes*, III. ; Virgil, *Æneid*, VI. ; Tacitus, *Histories*, I.

Third (Honours) Class—12 to 1.

The Third (Honours) Latin Class meets four days a week. It

[1] See footnote 2, page 55.

is intended to assist the studies of Candidates for Scholarships and Graduation with Honours. The work consists of—

1. Readings and explanations of more difficult Latin authors, such as Tacitus, Lucretius, Plautus, Martial, &c..
2. Lectures on Roman History and Literature, chiefly in connection with the Books read in the Class.
3. Composition, and Translation of Unseen Passages.
4. Occasional Critical Papers and Essays.
5. Written Examinations on the work done in the Class.

During the Winter Session the following books will be read : —Plautus, *Rudens;* Horace, *Epistles II.*, and *Ars Poetica;* Juvenal, or Lucan, VII. ; Tacitus, *Histories*, I., II.

Summer Session, 1897.

FRANCIS R. JAMIESON, M.A., *Lecturer.*

Senior Class—9 to 10, five days a week.

This class qualifies as a half-course for Graduation.[1] The work consists of—

1. The reading of the Latin authors prescribed for the Degree Examination in October 1897 and April 1898.
2. Lectures on Roman Literature, chiefly bearing on the authors read.
3. Lectures on Roman History, treating of the period prescribed for the Degree Examination.
4. Exercises in Latin Prose Composition.
5. Written Examinations on the work done in the Class.
6. Translation of passages from Latin into English, and from English into Latin "at sight."

The full Course may be completed by attendance either for another Summer Session or for half a Winter Session.

Third (Honours) Class—10 to 11.

This Class, in the Summer Session, qualifies as a half-course for Graduation with Honours in Classics. It meets four days a week, and is intended to assist the studies of Candidates for Scholarships, for Graduation with Honours, and for the Indian Civil Service. The work consists of :—

[1] See footnote 2, page 55.

1. Readings and explanations of some of the more difficult Latin authors, such as Tacitus, Lucretius, Plautus, Martial, Juvenal, Lucan, &c.

2. Lectures on Roman History and Literature, chiefly in connection with the Books read in the Class.

3. Essays on questions arising out of the Lectures or Books read, and exercises in Latin Prose Composition.

4. Written Examinations on work done in the Class, and on subjects prescribed for voluntary reading.

During the Summer Session of 1897, the books read will be selected from the programmes of work for Honours Graduation in April 1898 and April 1899.

Tutorial Class.

This Junior Class is intended for students preparing for the Preliminary Examination in October, and the work will be selected with that view. Special attention is directed to Latin Prose Composition, one exercise being done with the Class daily, and two written exercises done and corrected in each week.

GREEK.

PROFESSOR BUTCHER.

Junior Class—Taught by the Assistant, under supervision of the Professor : 10 to 11 o'clock, five days a week, and 11 to 12 on Tuesdays, Thursdays, and Fridays. The work consists of—

1. Readings of some Greek author, as Xenophon, Lucian, Plato (an easy dialogue), Homer, Euripides, or Aristophanes (selections).

2. Lectures on Greek History or Literature.

3. Exercises in Greek Prose Composition.

4. Translation of Unseen Passages.

5. Written Examinations.

Books recommended.—W. G. Rutherford's Greek Grammar, and First Greek Syntax ; F. E. Thompson's Elementary Greek Syntax ; Clyde's Greek Syntax ; Jebb's Primer of Greek Literature ; Peile's Primer of Philology ; Fyffe's Primer of Greek History ; Oman's History of Greece, or Cox's General History of Greece, or W. Smith's History of Greece.

Senior Class—11 to 12, five days a week.

This is the class which qualifies for the ordinary Degree of M.A.[1] The work consists of—

1. Readings of some Greek author, such as Thucydides, Demosthenes, Herodotus, Plato; Homer; a play of Aeschylus, Sophocles, Euripides, or Aristophanes.

2. Lectures on Greek Literature, History, or Philosophy.

3. Greek Prose Composition, or Translation of an Unseen Passage once a week, and a Lecture on the passage when the exercises are returned.

4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

5. Greek Verse Composition (voluntary).

Books recommended.—W. G. Rutherford's Greek Grammar, and First Greek Syntax; Goodwin's Greek Moods and Tenses; Greek Syntax, by F. E. Thompson; Sidgwick's Greek Prose Composition; Jebb's Primer of Greek Literature; Müller & Donaldson's History of Greek Literature; Jevon's History of Greek Literature, or Mahaffy's History of Greek Literature; Oman's History of Greece, or Cox's General History of Greece, or W. Smith's History of Greece; Greek Verse Composition (Sidgwick and Morris); A Manual of Comparative Philology, by Giles.

During the Winter Session 1896-97, the following books will be read:—Aeschylus, *Prometheus Vinctus*; Aristotle, *Ethics*, Bk. iv.; *Acts of the Apostles.*

Third (Honours) Class—10 to 11.

This Class meets four days a week. It is intended to assist the studies of Candidates for Scholarships and Graduation with Honours. The work consists of—

1. Readings and explanations of some of the more difficult Greek authors, such as Thucydides, Demosthenes, Plato, Aristotle, Aeschylus, Pindar, &c.

2. Lectures on Greek Literature, History, or Philosophy.

3. Greek Composition, and Translation of Unseen Passages.

[1] See footnote 2, page 55.

4. Occasional Critical Papers and Essays.

5. Written Examinations on the work done in Class.

During the Winter Session 1896-97, the chief work of the Class will be some plays of Euripides, and Demosth., *Lept.*, *Aristocr.*, *Timocr.*

Summer Session, 1897.

A. DOUGLAS THOMSON, M.A., *Lecturer.*

Senior Class—10 to 11, five days a week.

This Class qualifies as a half-course for Graduation.[1] The work consists of—

1. The reading of the Greek authors prescribed for the Degree Examination in October 1897 and April 1898.

2. Lectures on Greek History or Literature.

3. Greek Prose Composition, and Translation of Unseen Passages.

4. Written Examinations.

The full Course may be completed by attendance either for another Summer Session or for half a Winter Session.

Third (Honours) Class—9 to 10.

This Class meets four days a week. It is intended to assist the studies of Candidates for Scholarships, for Graduation with Honours, and for the Indian Civil Service. The work consists of—

1. The reading of books selected from the programme of work for Graduation with Honours in 1898 and 1899.

2. Lectures on Greek History or Literature.

3. Greek Prose Composition, and Translation of Unseen Passages.

4. Written Examinations.

This Class qualifies as a half-course for Graduation with Honours. The full Course may be completed by attendance either for another Summer Session or for half a Winter Session.

Junior (Tutorial) Class—11 to 12, five days a week.

This Class is intended for Students preparing for the Pre-

[1] See footnote 2, page 55.

liminary Examination in October next, and the work to be done will be selected with that view.

CLASSICAL ARCHÆOLOGY.

PROFESSOR BALDWIN BROWN.

Classical Archæology may be taken as one of the optional subjects for Honours in Classics.

An Honours Course of fifty lectures will be delivered in the Winter Session, 1896-7, in the Fine Art Class Rooms, on Mondays, Tuesdays, and Wednesdays, at 5 P.M.[1]

Additional Class-meetings of a tutorial character will be held as often as is found desirable, at hours to be afterwards arranged. The treatment of the subject will embrace—

1. A general survey of the field of study.

2. An examination of selected passages from ancient authors, bearing on the History of Classical Art.

3. A special study of one particular branch, the theme for 1896-7 being the Types of Greek Coins, with special reference to their value as illustrating Greek Sculpture. (Other special subjects, such as the History of Greek Vase Painting, or Greek Tektonics, will be taken up in succeeding Sessions.)

The text-books will be—Overbeck's "Schriftquellen" (a collection of passages from ancient authors bearing on Classical Art); Murray's "Handbook of Greek Archæology" (London, John Murray); Murray's "History of Greek Sculpture," 2nd Ed. (London, John Murray); and, for the special subject, Gardner's "The Types of Greek Coins" (Cambridge, University Press).

The subject will be treated from the artistic standpoint, which is now more and more insisted on by writers on this subject. A high degree of accuracy and considerable acquaintance with the chief Greek and Latin authorities will be required of Candidates for Honours, but no previous special knowledge either of Art or of Archæology will be expected of those joining the Class. The different branches, so far as time permits, will be opened up from the beginnings, and students will be assisted in the Tutorial Classes to understand technical terms and to appreciate the

[1] The Class hour may be changed if another hour is found more convenient.

artistic points which come up for discussion in the Lectures. They will also have access at suitable times to the collection of illustrations referred to in the Lectures, and to the Class Library, which contains some of the standard works.

RHETORIC AND ENGLISH LITERATURE.

PROFESSOR SAINTSBURY.

(*Ordinary Course*, 4 *to* 5, *five days a week throughout the Winter Session.*)

On Mondays, Wednesdays, and Fridays, the Lectures will be devoted, before Christmas, to a survey of Style both in Poetry and Prose from Chaucer to the Nineteenth Century; after Christmas to a similar survey of the General History and Contents of the Subject from the earliest texts to the present day. On three Fridays during the Session there will be Class Examinations, and at fortnightly intervals between them written Exercises will be done on Friday in Class. Two subjects for longer written Essays will also be given, one before, one after Christmas: and there will be Prizes for these Essays, distinct from the general Class Prizes.

On Tuesdays and Thursdays the Lectures will take for text the books prescribed for the year, some of which will be read page by page and line by line, while others will be dealt with more summarily. A certain number of these Lectures will be specially devoted to the subject of Rhetoric, the texts being "De Quincey's Essay," with Whately's *Rhetoric*, Bain's *Composition and Rhetoric*, and Hodgson's *Errors in English* for illustration. The prescribed books will always include parts of Chaucer, Spenser, Shakespeare, and Milton, together with portions of other writers from the sixteenth century to the present day. The Lectures on Style will be illustrated from Ward's *Poets* and Craik's *Prose Selections*.

(*Honours Course three days a week throughout the Winter Session.*)

The Professor will also give an Honours Course in two Halves of twenty-five Lectures each. The Half-Course before Christmas will be a Higher Rhetoric Course on the Theory of

Prose and Verse in English, opening with a sketch of the History of Literary Criticism from Aristotle onwards. The course after Christmas will be devoted to some special subject connected with the Honours period of the year. The subject for 1897 will be "The English Essay-Writers": that for 1898, "The Study of Nature in the Eighteenth Century."

Honours Courses.

G. GREGORY SMITH, M.A., *Lecturer.*

OLD AND MIDDLE ENGLISH.

A full Honours Course of Fifty Lectures (in two parts of Twenty-five Lectures each) on Old and Middle English will be delivered in the Winter Session.

A.—HISTORY OF OLD AND MIDDLE ENGLISH.

The work of this Class (Monday, Wednesday, and Friday from 3 to 4, beginning on Monday, 19th October) will consist of—

1. An Historical Outline of the Development of the English Language, in regard to (*a*) Phonetics, (*b*) Accidence, (*c*) Syntax, and (*d*) Vocabulary. Special attention will be given to the Dialects.

2. English Palæography.

Books for reference.—Sweet's *History of English Sounds* and *Oldest English Texts;* Ellis's *Early English Pronunciation;* Sievers's *Old English Grammar* (ed. Cook); Morris and Kellner's *Historical Outlines of English Accidence;* Kellner's *Historical Outlines of English Syntax;* Skeat's *Principles of English Etymology;* Oliphant's *Old and Middle English;* Murray's *Dialects of Southern Scotland;* Skeat's *Facsimiles of Old English Manuscripts.*

B.—OLD AND MIDDLE ENGLISH TEXTS.

The work of this Class (Monday, Wednesday, and Friday from 3 to 4, beginning on Wednesday, 6th January) will consist of (*a*) Readings in Old and Middle English, with more particular attention to some of the books prescribed for the Examination for the Honours Degree, and (*b*) Translation of Unseen Passages.

Summer Session, 1897.

ENGLISH LITERATURE.

An Honours Half-Course of Twenty-five Lectures on the Literature of the Eighteenth Century.

The work of the Class (Monday, Wednesday, and Friday from 12 to 1) will be an Historical and Critical Examination of the Literary Principles of the Eighteenth Century.

Books for reference.—Leslie Stephen's *English Thought in the Eighteenth Century;* Gosse's *Eighteenth Century Literature;* Volumes in the "English Men of Letters" Series; Prefaces in Ward's *English Poets* and Craik's *English Prose;* Beljame's *Le Public et les Hommes de Lettres en Angleterre au dix-huitième Siècle* (Hachette).

FRENCH LANGUAGE AND LITERATURE AND ROMANCE PHILOLOGY.

CHARLES SAROLEA, PH.D., LITT.D., *Lecturer.*

Ordinary Graduation Class—3 to 4, five times a week.

This class qualifies for the Ordinary Degree of M.A.[1] The work consists of—

1. Readings of some French author, such as Montaigne, Corneille, Racine, Molière, Boileau, Voltaire, Rousseau, and V. Hugo.

2. Lectures on French Literature or History.

3. French Prose Composition, or Translation of an unseen passage once a week, and a lecture on the passage when the exercises are returned.

4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

5. Lectures on the Philology and Historical Development of the French language.

Books to be read during the Winter Session 1896-97:—Lamartine, Discours, *Napoléon le Petit*, *William Shakespeare;* Victor Hugo, *Les Châtiments*, *L'Année terrible;* Musset, *Extraits;* Rousseau, *Extraits; Chanson de Roland.*

[1] See footnote 2, page 55.

Honours Class—4 to 5.

The Honours French Class meets four days a week. It is intended to assist the studies of Candidates for Scholarships and Graduation with Honours. The work consists of—

1. Readings and explanations of Old French Texts, and of some of the more difficult Modern French authors.

2. Lectures on French Literature or History, and on Romance Philology.

3. French Composition and Translation of unseen passages.

4. Occasional critical papers and essays.

5. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

Books to be read during the Session 1896-97 :—V. Hugo, *La Légende des Siècles*, *Shakespeare*, *Les Contemplations;* Lanson, *Littérature française;* Ozanam, *Dante.*

ITALIAN LANGUAGE AND LITERATURE AND ITALIAN PHILOLOGY.

Course of Fifty Lectures on the Honours Standard.

CHARLES SAROLEA, PH.D., LITT.D., *Lecturer.*

This Class meets three days a week. The work consists of—

1. Readings and explanations of Italian Classics of the 14th and 16th century (with special regard to Dante), and of some of the more difficult modern Italian authors.

2. Lectures on Italian Literature and History, and on Italian Philology.

3. Occasional critical Papers and Essays.

4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

Books to be read during the Session 1896-97 :—Dante, "Divina Commedia," "De Monarchia"; Manzoni, "I promessi Sposi"; Leopardi, Prose; D'Ancona, "Manuale della Litteratura italiana."

Students who desire to attend this Course are requested to send their names to Dr Sarolea, University, before 1st October.

GERMAN LANGUAGE AND LITERATURE AND TEUTONIC PHILOLOGY.

OTTO SCHLAPP, *Lecturer.*

Ordinary Graduation Class—4 to 5, five times a week.

This class qualifies for the Ordinary Degree of M.A.[1] The work consists of—

1. Readings of some Middle High German and Sixteenth Century Texts, and of such modern German authors as Winckelmann, Klopstock, Lessing, Herder, Goethe, Schiller, Jean Paul F. Richter, Heine, Uhland, Gutzkow, Freytag, Riehl, and Storm.

2. Lectures on German Literature or History.[2]

3. German Prose Composition, or translation of an unseen passage, or a critical paper or German essay at least once a week, and a lecture on the papers when returned.

4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

5. Lectures on the Philology and Historical Development of the German Language.

Books recommended.—Weisse, *German Grammar;* Victor, *German Pronunciation;* Duden, *Etymologie der Neuhochdeutschen Sprache;* Behagel, *Die Deutsche Sprache;* O. Weise, *Unsere Muttersprache;* Koch, *Geschichte der Deutschen Litteratur* (Göschen); Roquette, *Geschichte der Deutschen Dichtung;* W. Wackernagel (ed. E. Martin), *Geschichte der Deutschen Literatur.*

During the Winter Session 1896-97 the following books will be read or interpreted: *Nibelungen; Brant*, etc.; Schiller's *Maria Stuart;* Heine's *Nordsee.*

Honours Class—3 to 4.

The Honours German Class meets four days a week. It is intended to assist Candidates for Scholarships and Graduation with Honours. The work consists of—

[1] See footnote 2, page 55.

[2] These lectures, a syllabus of which will be published in due time, will be delivered *in German* on Fridays, and may be taken as a separate course on payment of the Five Shillings University Entrance Fee, and a Class Fee of One Guinea.

1. Readings and explanations of Middle or Old High German Texts, and of some of the more difficult modern authors.
2. Lectures on German Literature or History.
3. German Composition and Translation of unseen passages.
4. Occasional critical papers and German essays.
5. Written Examinations on the work done in Class, and on subjects prescribed for voluntary reading.

Books recommended.—In addition to those mentioned for Ordinary Graduation Class: D. Sanders, *Deutscher Wortschatz;* F. Kluge, *Etymologisches Wörterbuch der deutschen Sprache;* F. Blatz, *Neuhochdeutsche Grammatik;* Victor Henry, *Comparative Grammar of English and German;* Hermann Paul, *Mittelhochdeutsche Grammatik;* W. Scherer, *Geschichte der deutschen Litteratur;* Jul. Schmidt, *Geschichte der deutschen Litteratur von Leibniz bis auf unsere Zeit.*

During the Session 1896-97 the following books will be read or interpreted:—*Althochdeutsche Litteratur; Walther von der Vogelweide*, ed. Bartsch; Goethe, *Faust;* Schiller, *Naive und sentimentalische Dichtung.*

SANSKRIT AND COMPARATIVE PHILOLOGY.

PROFESSOR EGGELING.

A.—Sanskrit Language and Literature.

1. *Junior Class.*—Grammar and Exercises. Easy Texts (from Lanman's Reader). Easy translations from English into Sanskrit.

2. *Senior Class.*—Repetition of Grammar. Translations from English into Sanskrit. Texts, such as Kālidāsa's Raghuvaṅśa or Sakuntalā; Mricchakatikā; Manu's Institutes of Law; selected Hymns of the Rigveda (Lanman's Reader).

The Senior Class will be the Graduating Class in Sanskrit for the Ordinary M.A.; but those who attend with a view to Graduation must previously have passed an examination under Sect. IV., subs. 3 of the Ordinance, which will include plain passages for translation from and into Sanskrit, and grammatical questions.

Those who propose, in a subsequent session, to take up Sanskrit as a graduation subject, may attend the Junior Class during the Session 1896-97.

B.—Comparative Philology.

During the Session 1896-97, the Professor will be prepared to deliver a course of Fifty Lectures on the Principles of Indo-European Philology and the history of Linguistic Studies, provided a sufficient number of Students give in their names. This course will qualify as one of the optional Honours Classes in connection with Classical Honours.

HEBREW AND SEMITIC LANGUAGES.

PROFESSOR KENNEDY.

See Courses under Faculty of Divinity.

CELTIC.

PROFESSOR MACKINNON.

The Course for 1896-7 will be arranged as follows :—

1. *Lectures.*—At the commencement of the Session a course of fifteen to twenty lectures will be delivered on Celtic Phonology, and in March 1897 a similar course on the Old Period of Gaelic Literature.

2. *Reading and Exposition* (from middle of November 1896 till end of February 1897).—(1) Scottish Gaelic: Extracts for Reading, Part II.; Stewart's Grammar. (2) Irish Gaelic: Keating's Three Shafts of Death; O'Donovan's Grammar. (3) Old Gaelic: Extracts for Reading, Part II.; Windisch's Grammar and Irische Texte.

3. *Translations from English into Modern and Old Gaelic.*

Any student who attends this Class with a view to Graduation in Arts must previously have passed an examination (under Sect. IV., subs. 3 of the Ordinance), which will be in Scottish Gaelic, or Irish Gaelic, or Welsh; and will include translations from and into English, with grammatical, literary, and easy philological questions.

The fee for a Student who attends with a view to graduation is £3, 3s.

An Advanced Class will meet in the Winter Session, 1896-97, on Monday and Friday, at 3 P.M. The Class will read and transcribe Old Gaelic Texts.—Fee, £1, 1s.

A Gaelic Class for Junior students will meet in the Winter

Session 1896-97, Tuesday, Wednesday, and Thursday, at 3 P.M. They will read, on Tuesday and Thursday, Modern Scottish and Irish Gaelic, and commence the study of Old Gaelic ; Grammar and Exercises on Wednesday.—Fee for this class, £1, 1s.

Text-Books.—Extracts for Reading, Parts I. and II. ; Stewart's and Joyce's Grammar ; Windisch's Grammar.

II.—DEPARTMENT OF MENTAL PHILOSOPHY.

LOGIC AND METAPHYSICS.

PROFESSOR SETH.

Logic and Psychology—Junior Class—1 to 2.

The course in this class falls into three parts :—

(1) Elements of Logic, Deductive and Inductive; (2) Outline of the main facts of Empirical Psychology, dealing more particularly with the facts and processes of cognition ; (3) Introduction to the questions of philosophy, with special reference to the history of modern philosophy in England.

1. In the Logical part of the course the text-book used is Jevons's "Elementary Lessons in Logic."

It is extremely desirable that students, before entering the class, should have familiarised themselves with the main doctrines of Formal Logic; and a tutorial class (Fifteen Lectures) for those who desire it is held in summer by Mr Hardie, Assistant to the Professor. An examination is held about a fortnight after the opening of the Winter Session to test the knowledge of the class. It embraces the first twenty-one Lessons in Jevons with the exception of Lessons 4, 6, 7, 10, 11, and 13 ; for Lesson 10 students should substitute a printed chapter which they may obtain on application at the Matriculation Office. For those who fail to reach a reasonable standard in this examination, separate tutorial meetings will be held during the early part of the session.

The Lectures in Logic will assume this elementary knowledge to have been acquired, and will be devoted mainly to the principles of the subject. The chief theories of the Judgment and the ultimate nature of Inference will be discussed and references given to more advanced text-books.

2. In the Psychological division of the course no text-book is prescribed, but frequent reference is made to the leading works on the subject, and a manual such as Sully's "Outlines," Höffding's "Outlines," James's "Text-book," or Baldwin's "Elements," may be usefully read in connection with the lectures.

The lectures cover the chief topics of the Psychology of Cognition, with the Psychology of the Feelings and the Will in outline.

3. The Philosophical lectures give a sketch of the earliest systems of speculative thought in Ancient Greece and then pass to the beginnings of Modern Philosophy. Bacon, Descartes, Locke, Berkeley, and Hume are studied in succession.

Professor Fraser's "Selections from Berkeley" and certain chapters of Locke's "Essay" and Hume's "Enquiry" are used in connection with the lectures as an introduction to the problems of modern philosophy.

Metaphysics and History of Philosophy—Honours Class—3 to 4.

This Class, an Honours Course of fifty Lectures, is intended for those who have attended the ordinary course, or have otherwise some acquaintance with philosophy. The lectures deal in a more advanced way with the chief systems of modern philosophy, special attention being devoted to Spinoza and Kant. Guidance is also given in the study of Advanced Psychology, and some of the Lectures deal with the problems of Advanced Logic.

Lectures on Greek Philosophy are delivered as a part of this Course by Mr Hardie, Assistant to the Professor and Lecturer in Logic and Metaphysics.

The Class meets on Tuesday and Thursday throughout the Session, and during part of the Session at a separate hour for the Lectures on Greek Philosophy.

Summer Session, 1897.

R. P. HARDIE, M.A., *Lecturer.*

Honours Courses in Ancient Philosophy.

Each of the following will constitute a Half-Course qualifying for Honours in Mental Philosophy and in Classics :—

A.—Subject, Plato chiefly, but other subjects will be treated, in accordance with the requirements of the Class.

Books.—Among others, Plato, *Republic*, *Theaetetus*, and *Philebus*.

B.—Subject, Aristotle.

Books.—Two at least of the following :—Aristotle, *De Anima* and *Nicom. Ethics*, especially Bks. I.-IV. and X.; Trendelenburg, *Elementa Logices Aristotelecæ*.

Tutorial Class in Elementary Logic.

This Course of Fifteen Lectures on Logic is intended to prepare Students for the Ordinary Class of Logic and Metaphysics.

MORAL PHILOSOPHY.

PROFESSOR CALDERWOOD.

Ordinary Class.

Province and Aim of Moral Philosophy.

1. PSYCHOLOGY OF ETHICS.—Knowledge of Moral Distinctions ; form and source of this knowledge ; Rival Theories—Intuitional, Utilitarian, and Evolution Theories. Natural Impulses and Restraints. The Will—its Nature and Laws of Exercise. Moral Sentiments. Disordered Impulsive Force.

2. METAPHYSIC OF ETHICS.—Moral Government of the Universe. The Foundation of Virtue. Relation of Divine Sovereignty to the Will of Moral Agents. Origin of Evil. Immortality of the Soul.

3. APPLIED ETHICS.—Man's Position in the World. A necessary Individualism. Formation of Moral Character. Organisation of Society. Sociology in Anthesis to Socialism. Religious Sentiment.

4. THE HISTORY OF MORAL PHILOSOPHY.—The Rise of Philosophy ; Distinction of Moral from Intellectual Philosophy ; Development of Systems of Moral Philosophy in Ancient and Modern Times.

The Course includes oral and written examinations, and essays.

Text-Books.—The Professor's "Handbook of Moral Philosophy ;" Kant's "Groundwork of the Metaphysic of Ethics ;" Sidgwick's "Outlines of the History of Ethics."

Histories.—Schwegler, *History of Philosophy.* Windelband (special reference to Philosophic Problems). Falekenberg, *Modern Philosophy.* For use of terms, *Vocabulary of Philosophy*, Fleming, ed. Calderwood.

Honours Class—3 to 4 on Wednesday and Friday.

The History of Moral Philosophy from the time of Socrates.

Subjects of study.—The Sophists, The Teaching of Socrates as presented in Xenophon's "Memorabilia," and in Plato's "Protagoras" and "Apologia." The Ideal Philosophy of Plato as developed in the "Republic," and in other Dialogues. Aristotle's "Nicom. Ethics." The rise of Modern Philosophy; the "Method and Meditations" of Des Cartes; Spinoza's "Ethics," Books III., IV., V. The Scepticism of Hume. The Scottish Philosophy; Kant's Ethical System; Fichte's Practical Philosophy; Hegel's Ethics; Schopenhauer's Pessimism; Later developments of Ethical Thought.

Books.—Zeller's "Socrates and the Socratic Schools," Plato's "Republic," Jowett's Translation, Grant's "Ethics of Aristotle," Zeller's "Stoics, Epicureans, and Sceptics"; Kant's "Ethics," Hegel's "Philosophy of the State and of History" (Grigg's Philosophical Classics); Green's "Prolegomena to Ethics"; Utilitarianism, as in Mill's "Utilitarianism"; in Spencer's "Data of Ethics" and "Justice"; and in Sidgwick's "Methods of Ethics." Histories.—Ueberweg's, and Erdmann's; Burnet's "Early Greek Philosophy"; Benn's "Greek Philosophers."

Summer Session, 1897.

CHARLES DOUGLAS, M.A., D.Sc., *Lecturer.*

Honours Course in Psychology.

This Class (a half-course qualifying for Honours in Philosophy) will meet at eleven on Mondays, Wednesdays, and Fridays, beginning 5th May.

Attention will be directed mainly to principles and problems of ethical and philosophical interest; results of experimental research will be specially kept in view.

No text-book will be followed, but frequent references will

be given to James' "Principles of Psychology," Baldwin's "Hand-book of Psychology," Sully's "Human Mind," &c.

Honours Course in Ethics.

This Class (a half-course qualifying for Honours in Philosophy) will meet at twelve on Mondays, Wednesdays, and Fridays, beginning 5th May. The course is mainly for students who propose to take Honours Classes the following winter. The subject will be the recent development of English Ethics; and the lectures will discuss chiefly the books set for the Honours Examination: Green's "Prolegomena to Ethics," Sidgwick's "Methods of Ethics," and Spencer's "Data of Ethics."

COMMERCIAL AND POLITICAL ECONOMY AND MERCANTILE LAW.

PROFESSOR NICHOLSON.

The course, embracing two half-courses of 50 lectures each, qualifies for Graduation in Arts. The Lectures will follow the arrangement of John Stuart Mill's *Principles of Political Economy.*

1. METHODS USED IN ECONOMIC SCIENCE.—Analysis of Fundamental Conceptions, Wealth, Capital, &c.

2. PRODUCTION OF WEALTH.—Division of Labour—Accumulation of Capital—Growth of Population.

3. DISTRIBUTION OF WEALTH.—Socialism—Land Tenure—Wages—Profits—Rent—Trade Unions.

4. VALUE.—Money—Inflations and Depressions of Trade—Commercial Crises—Banking—Free Trade—Foreign Exchanges—Stock Exchange.

5. ECONOMIC PROGRESS.—Effects of Progress on Value, and on the relative Distribution of Wealth.

6. PRINCIPLES OF THE LIMITS OF GOVERNMENT INTERFERENCE WITH INDUSTRY.—Direct and Indirect Taxation—Incidence of Taxes—National Debts—Contracts—Joint Stock Companies—Patents—Copyrights.

Although Mill will be used as text-book, references will be constantly given to previous writers, *e.g.* Adam Smith and

Ricardo, as well as to more recent writers, *e.g.* Sidgwick, Walker, Jevons, Marshall, Bagehot, &c.

History.—One lecture a week on the Economic History of England. This course is not intended to give the history of the Theory of Political Economy, but to trace the principal facts and institutions in the material and social life of the people from an economic standpoint, *e.g.* Gilds, Feudal System, Land Tenures, Ecclesiastical Influence, Serfdom and the Poor, Forms and Amount of Wealth, Foreign and Internal Trade, &c.

THEORY, ART, AND HISTORY OF EDUCATION.

PROFESSOR S. S. LAURIE.

Theory, or Science, of Education.

A.—The End and Materials of Education.

The Possibilities and Limits of Education. The End of Education. The relation of the School to this End. The Educative Process generally, whereby the End is attained.

Materials or Subjects of Instruction conducive to the attainment of the End, and the carrying out of the Process. Definition of subjects of instruction in their school sense. Relative value of subjects for instruction and discipline respectively. Distinction of Real and Formal, Humanistic and Naturalistic subjects.

Material conditions of the life and growth of Mind, i.e., *Physiology and its Educational Lessons.*

B.—Science of Education, *i.e.*

Applied Psychology and Ethics.—1. The Psychology of Intelligence in its educational relations fully treated. Periods of Mental Growth. Methodology or the Principles and Rules of the Art of Instruction which the Science yields.

2. Psychology of the Ethical Nature of Man in its educational relations. The Real of Morality (Instruction and Training); the Formal in Morality (Discipline to Duty).

C.—Art of Education or Application of Principles and Rules.

I. *Intellectual.—Rules of the Art*, i.e. *Method in Intellectual Instruction, Training, and Discipline.*—Analytic exposition of

the Rules, showing their derivation from the Science of education. Application of the Rules to teaching of—

(1.) Real-Naturalistic subjects, *e.g.* Object-lessons, Elementary Science, Geography, &c.

(2.) Real-Humanistic subjects, *e.g.* Language, Literature, Economics, History, &c.

(3.) Formal subjects, *e.g.* Arithmetic, Geometry, Grammar, Foreign Languages.

II. *Ethical.—Rules of the Art*, i.e. *Method in Moral Training and Discipline.*—Motives. The Authority of the Teacher. The meaning of Authority. The nature and conditions of its exercise. Punishments, Rewards, and school discipline generally.

Organisation of a School. Organisation of a State-system. Ideas governing Primary, Secondary, and University Instruction respectively. The Manual and the Technical in Instruction. School appliances. Manipulation of a Class. The Teacher.

D.—History of Education and of Theories.[1]

Pre-Christian Education — 1. Education in Ancient Egypt. 2. Education among the Semitic Races. 3. Education of the Hindu Races. 4. The Education of the Ancient Persians. 5. Education among the Hellenic Races. The educational views of Plato and Aristotle. 6. Education among the Romans. 7. Detailed analysis and exposition of the Institutions of Quintilian. 8. Plutarch.

Christian Education—1. The decay of the Romano-Hellenic, and the rise of Christian, Education. 2. The Cathedral and Monastery Schools. 3. The Rise of Universities.

The Renaissance—1. Humanism as represented by Rabelais and Montaigne, Erasmus, Colet, Luther, Melancthon, John Sturm, Roger Ascham. Exposition of "The Scholemaster."

The Modern Movement — 1. Lord Bacon. 2. Ratichius. 3. Comenius. 4. Milton. 5. Analysis and exposition of John Locke's "Thoughts on Education," and the "Conduct of the Human Understanding." 6. Rousseau, Basedow, and Campe.

[1] In 1896-97 the Lectures will be confined to the Modern Movement.

7. Pestalozzi, Jacotot, Fröbel, Jean Paul Richter, Diesterweg, Dr Arnold. 8. Dr Andrew Bell and Joseph Lancaster. 9. Herbert Spencer and contemporary Realism.

Note.—The books to be thoroughly studied during the Session, apart from the Lectures, are *Comenius' Didactic*, and the Professor's book on "Language and Linguistic Method." The "Institutes of Education" must also be in the hands of the student. *Four written Examinations will be held during the Session, and Three Essays on educational principles or method called for.*

PRACTICE IN TEACHING.—Arrangements are made at the Training Colleges for securing training in the *Practice of Teaching* to the extent of the requirements of the University Schoolmaster's Diploma now recognised by the Education Department. Fee for this, £1, 10s. 6d. Facilities are also given for visiting one or two of the principal schools, and acquiring a knowledge of their organization.

PHILOSOPHY OF LAW.

PROFESSOR SIR LUDOVIC GRANT, BART.

This course of forty lectures, commencing on Tuesday, 15th October 1896, at 2, will qualify as a half-course for graduation. The Class will meet five days a week.

Scope of the Science defined. The State, its Functions and Legal Institutions, Marriage, Family, Property, Succession, Contract, Punishment, &c., examined. The Province of Jurisprudence determined. Examination of the Sources of Positive Law. Classification of Rights. The Lectures will include an historical review of the chief political and legal theories, ancient and modern.

Books of reference.—Ritchie, Natural Rights; Green, Principles of Political Obligation; Lorimer, Institutes of Law; Ahrens, Cour de Droit Naturel; Lerminier, Philosophie de Droit; Bluntschli, The Theory of the State; The Student's Austin; Holland, Jurisprudence. Sir Henry Maine's Works.

GIFFORD LECTURES ON NATURAL THEOLOGY.

Lecturer—PROFESSOR C. B. TIELE, OF LEYDEN.

These Lectures were endowed by the late Adam Gifford, Senator of the College of Justice, "for promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term." . . . "The lecturers appointed shall be subjected to no test of any kind, and shall not be required to take any oath, or to emit or subscribe any declaration of belief, or to make any promise of any kind; they may be of any denomination whatever, or of no denomination at all; they may be of any religion or way of thinking, or, as is sometimes said, they may be of no religion; or they may be so-called sceptics or agnostics or free-thinkers;—provided only that the 'patrons' will use diligence to secure that they be able reverent men, true thinkers, sincere lovers of and earnest inquirers after truth. I wish the lecturers to treat their subjects as a strictly natural science, the greatest of all possible sciences, indeed, in one sense, the only science,—that of Infinite Being, without reference to or reliance upon any supposed special exceptional or so-called miraculous revelation. The lecturers shall be under no restraint whatever in their treatment of their theme. The lectures shall be public and popular, that is, open not only to students of the Universities, but to the whole community, without matriculation."

The arrangements for 1896-97 *will be announced before the opening of the Session.*

III.—DEPARTMENT OF SCIENCE.

MATHEMATICS.

PROFESSOR CHRYSTAL.

Junior Class—Taught by the Assistant, under supervision of the Professor. 12 to 1.

Plane Geometry equivalent to Euclid, Books i., ii., iii., iv., and vi. (*Syllabus of Plane Geometry*, prepared by the Association

for the Improvement of Geometrical Teaching forms the text of the lectures); Solid Geometry, equivalent to Euclid, Book xi.; Modern Geometry; and Elementary Algebra.

Senior Class—9 to 10.

This is the qualifying class for the Ordinary Degree of M.A. and for the First Science Examination.[1]

Algebra, including the elements of the Theory of Equations, and of Determinants, the Theory of Limits and the Elements of Curve Tracing; Plane Trigonometry; Conic Sections, treated geometrically and analytically; Modern Geometry.

Intermediate Honours Class—Monday, Wednesday, Friday, 11 to 12.

This course will suit Engineers and other Science Students who do not wish to make a specialty of Pure Mathematics.

Elementary parts of the Differential and Integral Calculus, and of the Calculus of Finite Differences. Analytical Geometry, Plane, and Elementary Solid. It is assumed that the Student has a knowledge of the Theory of Equations, and of the elements of the Theory of Determinants before he joins this Class.

Advanced Honours Class—Monday, Wednesday, Friday, 10 to 11.

The subjects of this are the higher parts of the Differential and Integral Calculus; Differential Equations; Definite Integrals with special reference to Fourier's Theorem; Functions of Laplace and Bessel; Higher Plane Curves; Analytical Geometry of Three Dimensions.

Additional lectures on Quaternions, Projective Geometry, and other special subjects are given occasionally.

Tutorial Classes.—Occasional lectures are also given by the Class Assistant. The time is devoted to the repetition of parts of the class lectures and to the working of examples.

Home Exercises are prescribed weekly in all the classes.

Written Examinations are held during the Session. The class honours are determined solely by these examinations.

[1] See footnote 7, page 56.

Text-Books.—As a rule *special* text-books are not prescribed; but the student is recommended to select from the following:—

Geometry.—Wilson's Elementary Geometry, or the Text-Books of the Society for the Improvement of Geometrical Teaching, and one or more of the following, for the sake of the exercises they contain:—Mackay's, Todhunter's, Nixons', or Casey's edition of Euclid's Elements, and Casey's Sequel to Euclid.[1]

Algebra.—Chrystal, or Todhunter, Gross, Chambers's Mathematical Tables.

Solid Geometry and Conic Sections.—Taylor (smaller work) or Taylor[1] (larger work).

Trigonometry.—Todhunter, Walmsley, or Lock (M'Lelland and Preston[1] for Spherical Trigonometry).

Analytical Geometry.—Smith's Analytical Conic Sections; and Dyer's Exercises in Analytical Geometry. Students intending to take the Third Class are recommended to get Salmon's Conic Sections, Salmon's Higher Plane Curves,[1] and Salmon's Geometry of Three Dimensions,[1] or, instead of the last, Smith's Solid Geometry.

Projective Geometry.—Cremona's Elements of Projective Geometry translated by Leudesdorf, or Henrici's Article on *Geometry*, "Encyclopædia Britannica" (9th edition).

Higher Algebra and Theory of Equations, etc.—Burnside and Panton's, or Todhunter's Theory of Equations; Thomson's Introduction to Determinants, and Muir[1] or Scott[1]; and Salmon's Higher Algebra for those who mean to read for Mathematical Honours.

Differential and Integral Calculus.—Williamson's Treatises, Forsyth's Differential Equations,[1] Frost's Curve Tracing, Boole's Finite Differences.[1]

Summer Session, 1897.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

1. *Lower Senior*—11 to 12.

This Class qualifies for Graduation in Arts and Science as a

[1] Recommended to those only who make Mathematics a specialty.

First Half-Course[1][2] in Mathematics. The work consists of Algebra and Plane Trigonometry, corresponding to the First Half of the Winter Graduation Course.

2. *Higher Senior*—12 to 1.

This Class qualifies for Graduation as a Second Half-Course[1][2] if taken *after any* First Half-Course in Mathematics. Suitable also for Students reading for the more advanced part of the Winter Graduation Course. The work consists of Algebra and the elementary treatment of the Conic Sections, Geometrical and Analytical.

In each Class weekly exercises are prescribed, and two written examinations are held.

3. *Advanced Class*—10 to 11.

This Class qualifies as a First Half-Course for Graduation in Arts and Science, with Honours in Mathematics and Natural Philosophy, and will also, so far as is expedient, be adapted for Engineering Students.

The course will aim at a working acquaintance with the more elementary parts of Determinants and the Theory of Equations (not treated in the Winter Advanced Courses), Differential and Integral Calculus, Finite Differences, and Analytical Geometry.

Tutorial Classes.

The above Classes also serve for Tutorial Classes.

Weekly exercises are prescribed on the work of each class.

For text-books, see page 85.

NATURAL PHILOSOPHY.

PROFESSOR TAIT.

Ordinary Class.—(Qualifying for M.A. and First Science Examination.)[2]

The subjects embraced in this Course are :—

1. Properties of Matter including Inertia, Gravitation, Molecular Forces, &c.

[1] The first half of the Winter Graduation Course up to Christmas qualifies as a First Half-Course in Mathematics, and the second half of the Winter Course from Christmas to the end of the Session as a Second Half-Course. *Any* First Half-Course, along with *any* Second Half-Course, taken subsequently, qualifies as a full Course of Instruction for Graduation.

[2] See footnote 7, page 56.

2. Abstract Dynamics—including Kinematics, Statics and Kinetics of Solid, Liquid, and Gaseous Bodies, with their applications.
3. Sound, and Wave-propagation in general.
4. Heat (including Thermo-Dynamics).
5. Light (Geometrical and Physical Optics, and Radiation generally).
6. Electricity.
7. Conservation of Energy.
8. Astronomy (Descriptive and Physical).
9. Meteorology.

Properties of Matter, Abstract Dynamics, and Conservation of Energy, together with two or three others of the above divisions of the subject, are treated in detail every Session, the remainder being discussed in a more superficial manner, as it is impossible to enter at length into all in a single Session.

It is intended that in 1896-97, besides Sections 1, 2, and 7, Sections 5 and 6 shall form the more detailed part of the Course.

The Class is examined at intervals upon the subjects treated in the Lectures; and a prize is given for the best answering. In these examinations, which form an essential part of the class-work, no Mathematics are requisite, except the most elementary portions of Arithmetic, Algebra, and Geometry.

In January and March there are special Examinations on prescribed subjects, applying mainly to students competing for Class Prizes; and, on these two occasions only, the Class is divided into two parts—the division depending mainly upon the students' proficiency in Mathematics. In the Lower Division, the elements of Algebra and Geometry alone are required; in the Higher Division, Algebra, Geometry, and the Geometry of the Conic Sections are necessary. The Prizes in each Division are determined by adding the marks obtained in the two sets of Examinations above described. No student who has obtained a Prize in either Division can compete, in a subsequent Session, for a Prize in the same or in a lower Division.

The Text-Book for the Dynamical part of the Course will be Thomson and Tait's "Elements of Natural Philosophy" (Pitt Press, Cambridge). Of this, however, only the more elementary

portions will be required for the Lower Division. For the remainder of the subject the student may consult some of the following books : — Clerk-Maxwell's "Matter and Motion," Jenkin's "Electricity," Balfour Stewart's "Lessons in Physics," Tait's "Properties of Matter," "Heat," and "Light."

The special Examinations in January 1897 will be on :—

Higher Division.—Newton's "Three Sections" (Goodwin's "Course of Mathematics," Frost's "Newton," or any good edition of the *Principia*).

Lower Division.—Herschel's "Astronomy," the smaller work, in a recent edition, omitting the chapter on Perturbations. A series of explanatory lectures will be given by the Class-Assistant before this Examination.

The subjects for the March Examinations in both Divisions will be Kinematics and Dynamics. The range will depend upon the progress which the Class has made in these subjects.

Honours Classes.—(For Engineering and Science Students, and Arts Students wishing to graduate with Honours in Mathematics.)

Programme of Advanced Science Class, see Courses in Science.

The Intermediate Course of Fifty Lectures, by the Lecturer on Applied Mathematics, will include the more elementary parts of Dynamics of Particles, Rigid Solids, and Flexible Strings ; the Theory of the Potential ; and Conduction of Heat.

In the Advanced Course (given by the Professor) the subjects begun in the Intermediate Course will be further developed : and Thermodynamics, with one or more special branches of Applied Mathematics [such as the Kinetic Theory of Gases, the Lunar Theory, the Undulatory Theory, Vortex Motion, &c.] will be fully treated. It is most important to observe that no one can possibly profit by attendance at this class, unless he has fully mastered the subjects treated in the Intermediate Class.

One of the text-books in each Course is *Dynamics*, a reprint of "*Mechanics*," in the last edition of the "Encyc. Brit."

Summer Class of Physics, specially for Medical Students.

For particulars, see Courses in Faculty of Medicine.

PHYSICAL LABORATORY.

This has been established with the view of affording students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries. The Laboratory is open five or six hours daily in the Winter and Summer Sessions, under superintendence of the Professor and his Class-Assistant. Fee, £6, 6s. for the Winter Session. It is hoped that, with the aid of the valuable collection in the Museum, results of real use to science may be obtained.

A practical class, for instruction in the elementary processes of measuring Time, Mass, Length, Angle, Force, &c., will be formed in Winter and also in Summer. Each Course will extend to about three months. Fee, £2, 2s.

ELEMENTARY DYNAMICS.

C. G. KNOTT, D.Sc., *Lecturer.*

This Half-Course, to be given in the Summer Session 1897, is primarily intended to prepare students for the Intermediate Honours Class in Natural Philosophy and the Advanced Science Class in Dynamics (Engineering). To facilitate the work of these Winter Classes, all Honours and Science Candidates are strongly recommended to take this Course, in which only Mathematics of the standard of the Higher Preliminary will be used. Kinematics and Kinetics of a Particle, Impact, Simple cases of Kinetics of a Solid, Equilibrium, Graphical Statics, Hydrostatics, etc., will be taken up in order.

Although the work will reach a somewhat higher standard than is necessary for the Dynamical part of the M.A. Pass and 1st B.Sc. Examination in Natural Philosophy, the Class will also be serviceable to Students preparing for this Examination.

Text-Book recommended.—MacGregor's *Dynamics.*

Summer Session, 1897.

ADVANCED EXPERIMENTAL PHYSICS.

W. PEDDIE, D.Sc., *Lecturer.*

In this Class certain subjects, which may be treated mathematically in the Winter Advanced Honours Course of Natural

Philosophy, will be treated fully from the experimental point of view. The Course is also intended for undergraduates in Experimental Science. It is proposed to treat experimentally the advanced parts of Light, Electricity, Magnetism, &c. In connection with the Undulatory Theory, the following subjects will be discussed:—Reflection, refraction, and interference of ordinary and of polarised light; conical refraction; diffraction; electro- and magneto-optics; and the optical phenomena of crystalline substances. In Electricity and Magnetism such subjects as the discharge of electricity through gases; the screening effect of conducting sheets, and other phenomena associated with rapidly alternating electromotive forces; electromagnetic undulations; magnetic hysteresis, &c., will be treated. The experimental investigation of reciprocally related physical phenomena will be specially illustrated from various branches of physics; and, on the dynamical side, special attention will be devoted to the realisation of dynamical systems illustrative of physical phenomena.

Tutorial Class.

NATURAL PHILOSOPHY (*Advanced Honours*).

The work will correspond as closely as possible to that of the Winter Advanced Honours Course—Undulatory Theory, &c., being fully treated. The Class is intended for Students preparing for the above Winter Course, or for the Advanced Honours Examination.

ASTRONOMY.

PROFESSOR COPELAND.

(*Eighty Lectures, and, on different days, Twenty Meetings of two hours each for Observatory work.*)

Lectures on Practical Astronomy will be delivered on Mondays, Tuesdays, Wednesdays, and Thursdays. Instruction in the use of portable and fixed astronomical instruments will be given at the Royal Observatory on Blackford Hill, on Fridays, beginning at 8 P.M. Attendance at the evening demonstrations is obligatory on all who take Astronomy as a qualifying course for gradu-

ation. The Lectures will be divided into two courses, the first of which will embrace the theory and use of Astronomical Instruments, together with as much General Astronomy as is requisite to guide the student in making observations in the field as well as in an observatory. The Second Course will treat of the utilization of observations of Comets, etc., in the computation of orbits and ephemerides.

CHEMISTRY.

PROFESSOR CRUM BROWN.

This Course, the same as for Students of Medicine and Science, embraces One Hundred Lectures and Fifty Meetings for Practical Work in the Practical Chemistry Class-Room.

ZOOLOGY.

PROFESSOR EWART.

This Course, the same as for Students of Medicine and Science, embraces Fifty Lectures and Fifty hours for Practical Work.

BOTANY.

PROFESSOR BAYLEY BALFOUR.

This Course, the same as for Students of Medicine and Science, embraces Fifty Lectures and Fifty hours for Practical Work.

GEOLOGY, INCLUDING MINERALOGY.

PROFESSOR GEIKIE.

For Synopsis of this Course, see under Pure Science.

IV.—DEPARTMENT OF HISTORY AND LAW.

HISTORY.

PROFESSOR PROTHERO.

The Course qualifies for Graduation in Arts. The subject, until further notice, is GENERAL BRITISH HISTORY, divided into the following Periods and Subjects, of which a fuller syllabus will be issued by the Professor after the commencement of the Session :—

Part I.—1. Celtic and Roman Britain (to A.D. 400).—2. The English and Scottish Conquests (400-613). — 3. The Early Church.—4. The English and Scottish Kingdoms (613-855).—5. The Danish Conquests (855-1042).—6. The Norman Conquest (1042-1087).—7. The making of Scotland (685-1057).—8. The Norman Monarchy (1066-1154).—9. The Angevin Monarchy (1154-1199).—10. Celt and Teuton in Scotland (1057-1174).—11. Norse and English Conquests in Wales and Ireland (795-1175).—12. The Charters (1199-1217). — 13. The growth of Parliament (1217-1272). — 14. England, Wales, and Scotland (1175-1328).—15. The Great War with France, part i. (1327-1377).—16. The Lancastrian Revolution (1377-1413).—17. Independent Scotland (1328-1424).—18. The Great War with France, part ii. (1413-1453).—19. The Yorkist Revolution (1450-1485).—20. King and Nobles in Scotland (1424-1488); Ireland (1175-1494).

Part II.—21. The Tudor Monarchy (1485-1603).—22. The Reformation in England and Scotland (1529-1603).—23. England, Scotland, and Europe (1485-1603).—24. Crown and Parliament (1603-1640).—25. The Long Parliament and the Protectorate (1640-1660).—26. Restoration and Revolution (1660-1692).—27. Whigs and Tories: William III. and Marlborough (1689-1715).—28. Scotland and Ireland: the Union (1688-1715).—29. Colonies and Commerce (1600-1715).—30. The Whig Supremacy (1715-1760).—31. India and America (1715-1763).—32. George III. and the Parliament (1760-1784).—33. The American War (1763-1783).—34. Pitt and the French Revolution (1784-1815).—35. Ireland: the Union (1715-1800).—36. India (1763-1815).—37. Reaction and Reform (1815-1832).—38. The Reformed Parliament (1832-1866).—39. The Crimean War and the Mutiny (1853-1858).—40. The growth of Democracy (1866-1885).

N.B.—During the Session 1896-97 the Lectures will deal mainly with Part II. of the above Syllabus, Part I. being treated only in outline.

Work of the Class.—1. Lecture daily, except Saturdays, at twelve. One hour a week, if possible, will be devoted to the discussion of special points, notes on original authorities, &c.

2. Four Class Examinations will be held, and two or more Essays set, during the Session. Honours are awarded to candidates distinguished both in the examinations and in the essays.

3. The History Reading-Room (adjoining Professor Kirkpatrick's Class-Room) may be consulted by members of the History Classes on Mondays and Fridays from 11 to 1, and on Wednesdays from 2 to 4.

Books recommended.—For elementary purposes, S. R. Gardiner's "Student's History of England," J. R. Green's "Short History of the English People," J. F. Bright's "History of England," or Ransome's "Advanced History of England," and Macarthur's "History of Scotland." For wider study, see the lists given in the "Introduction to English History" by Gardiner and Mullinger, Part II.

Honours Classes.

PROFESSOR PROTHERO.

I. Introductory Sketch. II. The Policy of Elizabeth. III. The Earlier Stuarts: American Colonies and East Indian Trade. IV. Cromwell and the Later Stuarts: France, Spain, Holland. V. The Revolution and its results. VI. Walpole and the Peace. VII. Chatham and the Conquests of India and America. VIII. The American Revolution. IX. Pitt and Free-Trade. X. The Revolutionary and Napoleonic Wars.

A fuller syllabus will be issued by the Professor after the commencement of the session.

Books recommended.—Lodge, "Modern Europe" (Murray, 1885); Dyer, "Modern Europe," Vols. iii., iv.; Fyffe, "Modern Europe," Vol. i.; Seeley, "History of British Policy," and "Expansion of England"; Cunningham, "Growth of English Industry and Commerce," Vol. ii.; Lyall, "British Dominion in India"; "Epochs of American History," Thwaites and Hart, (Longmans); Atlases of Historical Geography, by Spruner, Droysen, Colbeck, or Gardiner. Other authorities will be mentioned by the Professor at the beginning of the session.

This Course of Fifty Lectures qualifies for graduation in Arts

with Honours in History. The Lectures will be given on Mondays, Wednesdays, and Fridays at 10, beginning on 16th October.

Two class examinations will be held, and two or more essays set, during the session. Students in this class may attend Mr Heatley's advanced course on "The English Kingship" (Wednesdays at 11), without fee, and may use the History Reading-Room.

The Honours Subject for the session 1897-98 will be "Nationality and Reform in Great Britain and Europe, 1815 to 1878," with special attention to the Revolutions of 1830 and 1848.

Books recommended for preliminary study—Lodge's "Modern Europe": Fyffe's "Modern Europe," Vols. ii., iii.; Bright, "History of England," Vols. iii. iv.

Wycliffe: his Times, Political Influence, &c.

Honours Course: Fifty Lectures.

PROFESSOR KIRKPATRICK.

I. Introductory—conflicts between State and Church—precursors of Wycliffe. II. Outline of Wycliffe's career—his doctrines—Lollardy—survival of Wycliffe's influence. III. The Great Schism—the Empire and the Papacy—Huss, Jerome, of Prague, and Peter Payne—Luther. IV. Illustrations of Wycliffe's doctrines from his works and other original sources.

Syllabus on application to the Professor.

Books recommended.—Wycliffe's Works—"Select English Works," ed. by Thomas Arnold, 3 vols. 1869-71; "English Works of Wyclif hitherto unprinted," ed. by F. D. Matthew, 1880; "Johann von Wiclif und die Vorgeschichte der Reformation" (by Dr G. V. Lechler, 2 vols., Leipzig, 1873) (or translation by Lorimer); "Fasciculi Zizaniorum," ed. by W. W. Shirley (Rolls Series, 1858); "Political Songs," ed. by Wright (Rolls Series); "Chronicon Angliae," ed. by E. M. Thomson, 1874; Works of Langland and Chaucer; Walsingham's "Historia Anglicana," ed. by Riley (Rolls Series); Loserth's "Wiclif und Hus" (or translation); James Baker's "Peter Payne, a great forgotten Englishman"; Palacky's "Documenta Magistri Jo. Hus vitam illustrantia" (1403-18); Wycliffe's "Wicket";

"Trialogus" (ed. by Lechler; Clar. Press); Creighton's "Papacy during the Reformation" (vols. I. and II.), &c.

These Lectures, qualifying as a full course for graduation in Arts with Honours in History, or with Honours in English, or as a half-course for graduation in Law, will be given on Mondays, Tuesdays, and Thursdays, at 4 P.M., beginning on Thursday, 15th October 1896 (after Christmas, Tuesdays and Thursdays only). Students attending them may use the History Reading Room, superintended by Mr Heatley, the Professor's Assistant, on Mondays and Fridays from 11 to 1, and on Wednesdays from 12 to 2. They may also attend Mr Heatley's advanced course on "The English Kingship," on Wednesdays, at 11, without additional fee.

CLASSICAL ARCHÆOLOGY AND HISTORY OF ANCIENT ART.

PROFESSOR BALDWIN BROWN.

This Course qualifies as an alternative subject for Honours in History. For details see page 67.

FINE ART.

PROFESSOR BALDWIN BROWN.

This Course of one hundred Lectures, qualifying for the M.A. degree, is designed—

1. To bring before students, by critical descriptions and illustrations, the chief ancient and modern works of Architecture, Sculpture, Painting, and the Decorative or Industrial Arts.

2. To show how these works are connected in origin and use with the national and social life of successive epochs; and, conversely, how Artistic Monuments illustrate Classical and Biblical literature, and bear on historical investigation in general.

3. To explain as far as practicable the technicalities of the various Arts, and to open up those aspects of Art which present themselves naturally to the artist, but are sometimes overlooked by the literary student.

On the historical side—

The characteristics of different styles and schools of Art will be broadly indicated, but this part of the subject, which can be studied from books, will not be dwelt upon at length.

On the artistic side—

Particular stress is laid on the explanation of different materials and technical processes, as upon these largely depend the particular forms in which beauty is realised in the various works of human hands.

Arrangements for the work of the Class :—There are Lectures daily at 3 P.M. Three Class examinations are held, and a series of eight Essays are set for the Cousin Prize (£15). The Essays are included in the work required from those taking the Course for Graduation.

The Class Library, Reading Room, and collections of examples are open to members of the Class.

Museums, &c., are visited from time to time on Saturdays.

The Professor's manual, "The Fine Arts," is used, so far as it goes, as a text-book. Other books to be read by those taking the Course for Graduation are indicated on page 67.

CONSTITUTIONAL LAW AND HISTORY.

PROFESSOR KIRKPATRICK.

This Course is divided into two half-courses, the first treating mainly of the Constitutional History of England, the second treating of that of the United States of America, of France, Germany, Switzerland, etc. (see under Faculty of Law).

ECCLESIASTICAL HISTORY.

PROFESSOR TAYLOR.

(See under Faculty of Divinity.)

ROMAN LAW.

PROFESSOR MACKINTOSH.

The Course qualifying for Graduation in Arts will extend next Winter Session to about ninety meetings of the Class. It will be divided into two distinct parts. The first half (extending to not less than forty-four meetings of the Class) will deal with the Constitutional and Legal History of Early Rome, the Sources

of the law, the rise of Jurisprudence, Codification, and other topics belonging to the external history and the general part of the civil law. It is intended to serve as a historical introduction to the study of the special departments. This half, ending before the Christmas Vacation, qualifies as a Half-Course for Graduation in Arts.

The second half of the Course will be devoted to a systematic exposition, in detail, of the law relating to persons and the family, and to property and real rights, according to the order of Justinian's Institutes.

Fee for the Half-Course, £2, 2s. ; for the full Course, £4, 4s.

Text-Books.—The Institutes of Gaius and of Justinian.

In connection with the historical lectures, students are referred to Muirhead's "Historical Introduction to the Private Law of Rome," Ortolan's "Histoire de la Législation Romaine" (or the English translation), and Maine's "Ancient Law."

PUBLIC INTERNATIONAL LAW.

PROFESSOR SIR LUDOVIC GRANT, BART.

This Course of Forty Lectures commences on 5th January 1897, at 2. The Class will meet *five* days a week. The Course will include—

1. An historical retrospect.

2. Some account of the science and literature of Public International Law.

3. An examination of the sources, and a critical exposition of the leading doctrines, of Public International Law.

Students are recommended to consult Wheaton's History of the Law of Nations, Introduction ; Nys's Les Origines du Droit International ; Phillimore's International Law ; Lawrence's Essays on Modern International Law ; Hall's International Law; Westlake's International Law ; Pitt Cobbett's Select Cases ; Lawrence's Principles of International Law. *Vide* under Faculty of Law.

Class Prize and Honour Lists.

SUMMER SESSION, 1895.

HUMANITY.

HONOURS CLASS—HONOURS GRADUATION HALF-COURSE.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—(*a*) FOR CLASS WORK.—1. Jessie Muir, Hawick (*Medal*); 2. T. S. Macpherson, Kingussie; 3. Ethelwyn Lemon, Northumberland. (*b*) FOR EXAMINATIONS ON UNPREPARED WORK.—1. T. S. Macpherson, Kingussie (*Medal*); 2. Jessie Muir, Hawick; 3. Ethelwyn Lemon, Northumberland.

SECOND-CLASS CERTIFICATES OF MERIT.—4. Kenneth N. Knox, Polton; 5. Alexander F. Black, East Calder.

SENIOR CLASS—PASS GRADUATION HALF-COURSE.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. Charles H. Moore, Musselburgh (*Medal*); 2. Emily M. Milligan, Edinburgh; 3. David Robertson, Stranraer; 4. Rosa Stoltz, Liberton; 5. Louisa R. Boyd, Edinburgh; 6. Helen Macfie, Whithorn.

SECOND-CLASS CERTIFICATES OF MERIT.—7. Bessie H. A. Robson, Edinburgh; Isabella C. Black, East Calder; and James M. Hogge, Edinburgh—equal; 10. William Jeffrey, Newcastle-on-Tyne; 11. Bessie B. Bird, Berwickshire; 12. Charlotte B. MacDonald, Aberdeen; 13. Arthur J. Brock, Kirkliston; 14. Alexander R. Cook, Fountainhall; 15. W. P. Borland, Prestonpans; 16. Samuel G. Kerr, Edinburgh; 17. Grace F. Matthew, Corstorphine.

PRIZE FOR ROMAN LITERATURE AND HISTORY.—1. Emily M. Milligan, Edinburgh.

HONOURABLE MENTION.—2. Charles H. Moore, Musselburgh; 3. Louisa R. Boyd, Edinburgh, and Helen Macfie, Whithorn—equal; 5. Charlotte B. MacDonald, Aberdeen; 6. Rosa Stoltz, Liberton.

PRIZE FOR LATIN PROSE COMPOSITION.—1. David Robertson, Stranraer.

HONOURABLE MENTION.—2. Charles H. Moore, Musselburgh, and William Smith, Edinburgh—equal; 4. Isabella C. Black, East Calder; Catherine J. Drummond, Edinburgh; and James M. Hogge, Edinburgh—equal; 7. Arthur J. Brock, Kirkliston; Charlotte B. MacDonald, Aberdeen; Alexander Grant, Glenrinnes; and Rosa Stoltz, Liberton—equal.

JUNIOR CLASS—PRELIMINARY COURSE.

PRIZE AND FIRST-CLASS CERTIFICATE OF MERIT.—1. William C. Douglas, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—2. Sara G. Croal, Edinburgh; 3. J. C. B. Irons, Edinburgh; 4. Margaret C. Watson, Kirkcudbright; 5. Percy E. Nobbs, St Petersburg.

LATIN PROSE COMPOSITION.—1. J. C. B. Irons, Edinburgh; 2. William C. Douglas, Edinburgh, and Margaret C. Watson, Kirkcudbright—equal; 4. Percy E. Nobbs, St Petersburg; and Sara G. Croal, Edinburgh—equal.

FRANCIS R. JAMIESON, M.A., *Lecturer.*

GREEK.

HONOURS CLASS—HONOURS GRADUATION HALF-COURSE.

PRIZE AND FIRST-CLASS CERTIFICATE OF MERIT.—1. T. S. Macpherson, Kingussie.

SECOND-CLASS CERTIFICATES OF MERIT.—2. A. F. Black, Midlothian; J. H. Cattanach, Edinburgh; and Alexander Flint, Edinburgh—equal.

COMPOSITION.—T. S. Macpherson.

SENIOR CLASS—PASS GRADUATION HALF-COURSE.

SECOND-CLASS CERTIFICATES OF MERIT.—1. David Robertson, Stranraer; 2. Charles A. Souter, Arbroath.

A. DOUGLAS THOMSON, M.A., *Lecturer.*

ENGLISH LITERATURE (HONOURS CLASS).

FIRST-CLASS CERTIFICATES.—1. George Douglas Shepherd, Ecclesmachan (*Medal*); 2. Louisa R. Boyd, Edinburgh, and Emily M. Milligan, Edinburgh—equal.

SECOND-CLASS CERTIFICATE.—4. Louisa Lane M'Crady, Charleston, S.C., U.S.A.

William Porter, Edinburgh, obtained the first place in the Essay, but did not take the Examination.

G. GREGORY SMITH, M.A., *Lecturer.*

ELEMENTARY HEBREW.

FIRST-CLASS CERTIFICATES OF MERIT.—1. John C. Mack, M.A., Edinburgh (*Medallist*); 2. A. M. Gordon, M.A., Halifax, Nova Scotia; 3. J. A. M'Ilvride, Edinburgh; 4. Thomas A. Fraser, Leith; 5. W. S. Simpson, Leslie.

SECOND-CLASS CERTIFICATES OF MERIT.—6. D. M. Aitken, M.A., Dalkeith; 7. A. W. Mitchell, M.A., Dunfermline.

The following gentlemen were present at one examination, and attained to the rank of SECOND-CLASS CERTIFICATES:—W. A. Curtis, Caithness; Robert White, M.A., Edinburgh; J. P. Murdoch, M.A., Dalkeith; G. Scott Phythian, Leeds; W. Laurie Webster, M.A., Edinburgh.

ELEMENTARY ARABIC.

First-Class Certificate of Merit.—James B. Penman, M.A., Stranraer.

Honourable Mention.—Frederic Hendry, M.A., Aberlour; J. A. M'Ilvride, Edinburgh; W. W. Reid, M.A., Inverness-shire.

D. M. KAY, B.Sc., B.D.,
University Assistant to Professor of Semitic Languages.

ANCIENT PHILOSOPHY.

HONOURS HALF-COURSE.

No competitive examinations were held.

R. P. HARDIE, M.A., *Lecturer.*

PSYCHOLOGY.

HONOURS HALF-COURSE.

No competitive examinations were held.

C. M. DOUGLAS, M.A., D.Sc., *Lecturer.*

MATHEMATICS.

ADVANCED CLASS—HONOURS HALF-COURSE.

Prizes and First-Class Certificates.—J. B. Meiklejohn, Thurso (*Medal*); E. M. Anderson, Dundee; W. Blackadder, Broughty Ferry; G. Ednie, Edinburgh; J. Lornie, Perth; J. M. Low, Leith; J. T. Young, Edinburgh.

HIGHER SENIOR.

Prize and First-Class Certificate.—W. A. Curtis, Edinburgh.

Second-Class Certificate.—R. A. Edwards, Edinburgh.

LOWER SENIOR.

Medal, Prize, and First-Class Certificate.—A. B. Keith, Joppa.

Second-Class Certificates.—A. M. Anderson, Edinburgh; A. Flint, Edinburgh; J. A. Gray, Edinburgh; A. G. Hogg, Edinburgh; A. M'Keand, Wigtown; D. L. Norrie, Edinburgh; Bessie H. A. Robson, Edinburgh; A. Sharp, Galashiels.

CHAS. TWEEDIE, M.A., B.Sc., *Lecturer.*

APPLIED MATHEMATICS.

THEORY OF ELECTRICITY AND MAGNETISM.

No competitive examinations were held.

C. G. KNOTT, D.Sc., *Lecturer.*

ADVANCED EXPERIMENTAL PHYSICS.

PRIZES AND FIRST-CLASS CERTIFICATES.—1. A. Brown and A. C. Smith—equal (*Medallists*); 3. A. H. Firth.

ADVANCED NATURAL PHILOSOPHY.

PRIZE AND FIRST-CLASS CERTIFICATE.—1. L. O. Critchley.
SECOND-CLASS CERTIFICATE.—2. E. Horsburgh; 3. D. M. Aitken.
W. PEDDIE, D.Sc., *Lecturer.*

WINTER SESSION, 1895-96.

LATIN.

HONOURS CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. A. B. Keith, Joppa; 2. D. L. Norrie, Edinburgh (*Medallists*); 3. T. S. Macpherson, Kingussie; 4. S. G. Campbell, Londonderry, and J. Lees, Ayr—equal.
SECOND-CLASS CERTIFICATES OF MERIT.—6. W. A. Curtis, Edinburgh, and Ethelwyn L. Lemon, Northumberland—equal.
PRIZES FOR LATIN PROSE COMPOSITION.—1. D. L. Norrie, Edinburgh; 2. A. B. Keith, Joppa, and Jessie Muir, Edinburgh—equal.
HONOURABLE MENTION.—W. A. Curtis, Edinburgh.
PRIZE FOR HISTORY OF LITERATURE.—A. B. Keith, Joppa.
PRIZE FOR VERSE COMPOSITION.—W. A. Curtis, Edinburgh.

SENIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. William Dunbar, Edinburgh; 2. R. C. S. Keith, Joppa; 3. William Rennie, Addiewell (*Medallists*); 4. B. H. Richardson, Edinburgh; 5. Chrissie M. Ross, Arbroath; 6. C. G. Mackay, Pitlochry; 7. S. A. Kinnier Wilson, Edinburgh; 8. Augusta M. C. Davidson, Edinburgh, and James M. Dunnett, Kilmarnock—equal; 10. J. Y. Bell, Edinburgh; 11. J. Stirling Ross, Edinburgh; 12. Bessie H. A. Robson, Edinburgh.
SECOND-CLASS CERTIFICATES OF MERIT.—13. J. M. Darling, Edinburgh; 14. Harry C. Norman, North Devon, and Sam F. Stewart, Largs—equal; 16. Matthew S. Ketchin, Milton Bridge; 17. A. Milne, Edinburgh; 18. T. Paterson, Edinburgh; 19. Rosa G. C. Stoltz, Liberton; 20. George A. Russell, Dundee; 21. Jeannie C. Thomson, Rothesay; 22. Elizabeth A. Duncan, Edinburgh; 23. William Robertson, Trinity; 24. T. B. Copeland, Edinburgh; 25. Jessie A. M'Kechnie, Edinburgh, and John M. Shaw, Inverness—equal; 27. E. R. I. Stevenson, Broughty Ferry; 28. Alexander Waddell, Edinburgh; 29. Peter Campbell, Oban, and Ralph A. Wilson, Broughty Ferry—equal; 31. R. S. Enever-

Todd, Musselburgh; Donald Fraser, Dalbeattie; and George Wedderspoon, Fort-George—equal; 34. James W. Meldrum, Edinburgh; 35. Annie L. Mackay, Edinburgh; 36. Thomas C. Adam, Blairgowrie, and Lucy E. M'Farlane, Prestonkirk—equal; 38. William Geddie, Edinburgh; 39. Edith Hooper, London; 40. P. Ward, Edinburgh; 41. R. J. Hunter, Edinburgh; Janet B. Imrie, Castle-Douglas, and H. C. Liddell, Edinburgh—equal; 44. T. A. Menzies, Hull.

Prizes for Latin Prose Composition.—1. William Dunbar, Edinburgh; 2. R. C. S. Keith, Joppa, and William Rennie, Addiewell—equal.

Honourable Mention.—4. Chrissie M. Ross, Arbroath; 5. C. G. Mackay, Pitlochry, and B. H. Richardson, Edinburgh—equal; 7. S. A. Kinnier Wilson, Edinburgh; 8. J. V. Bell, Edinburgh; 9. Augusta M. C. Davidson, Edinburgh; 10. Bessie H. A. Robson, Edinburgh; 11. H. C. Liddell, Edinburgh; 12. Hans F. Eggeling, Edinburgh.

Prize for Roman Literature and History.—1. Chrissie M. Ross, Arbroath.

Honourable Mention.—2. C. G. Mackay, Pitlochry; 3. William Rennie, Addiewell, and B. H. Richardson, Edinburgh.

JUNIOR CLASS.

Prizes and First-Class Certificates of Merit.—1. Alice B. Lennie, Trinity; 2. D. J. Macnaughten Leith, Dundee (*Medallists*); 3. Marion I. Gray, Edinburgh; 4. William Anderson, Orkney; 5. Margaret C. W. Young, Edinburgh; 6. James Winchester, Edinburgh; 7. Mary G. Williamson, Allahabad; 8. Robert D. S. Grant, Wick.

Second-Class Certificates of Merit.—9. George Wilkie, Leven; 10. Williamina Smith, Ballater; 11. Kenneth Cameron, Inverness; 12. William Young, Stirling, and Edward H. Calvert, Annan—equal; 14. James S. West, Coupar-Angus; 15. Helen A. Lawson, Alloa; 16. Alda Matheson, Ross-shire; 17. James H. Fordyce, Madderty; 18. Helen Hoyle, Lancashire; 19. John L. Peters, Dundee; 20. A. W. Bain, Musselburgh; 21. Andrew Ross, Inverness; 22. Alexander C. Scrimgeour, Perth; 23. John Tullis, Leuchars.

Prizes for Latin Prose Composition.—1. William Anderson, Orkney; 2. J. D. Macnaughten Leith, Dundee; 3. J. Campbell B. Irons, Edinburgh.

Honourable Mention.—4. Alice B. Lennie, Trinity; 5. Williamina Smith, Ballater; 6. William Young, Stirling; 7. Robert D. S. Grant, Wick; 8. Margaret C. W. Young, Edinburgh; 9. W. G. Alexander, Leith, and James Winchester, Edinburgh—equal; 11. Marion I. Gray, Edinburgh; 12. Edward H. Calvert, Annan, and Kenneth Cameron, Inverness—equal; 14. George Wilkie, Leven.

PRIZE FOR ROMAN LITERATURE AND HISTORY.—1. Mary G. Williamson, Allahabad.

HONOURABLE MENTION.—2. Alice B. Lennie, Trinity; 3. William Anderson, Orkney, and D. J. Macnaughten Leith, Dundee—equal; 5. J. L. Peters, Dundee, and Margaret C. W. Young, Edinburgh—equal; 6. Robert D. S. Grant, Wick; 7. Marion I. Gray, Edinburgh.

W. R. HARDIE, M.A., *Professor.*

GREEK.

HONOURS CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. Arthur B. Keith, Joppa (*Medallist*); 2. Marshall N. G. Gray, Edinburgh; 3. Sidney G. Campbell, Londonderry.

SECOND-CLASS CERTIFICATES OF MERIT.—4. David L. Norrie, Edinburgh; 5. Thomas S. Macpherson, Kingussie.

COMPOSITION PRIZE.—Marshall N. G. Gray.

HONOURABLE MENTION.—D. W. Inglis, Northumberland, and Jessie Muir, Hawick—equal.

SENIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. William Rennie, Addiewell, and William Dunbar, Edinburgh—equal (*Medallists*); 3. R. C. S. Keith, Joppa, and B. H. Richardson, Edinburgh—equal; 5. James S. Ross, Edinburgh; 6. Charles D. Mackay, Pitlochry; 7. Augusta M. C. Davidson, Edinburgh; 8. James Y. Bell, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—9. James M. Dunnett, Kilmarnock; 10. John M. Darling, Edinburgh; 11. Henry C. Liddell, Edinburgh; 12. J. W. Meldrum, Edinburgh; 13. Kenneth N. Knox, Polton; 14. Francis Esquilant, Penicuik; 15. Hans F. Eggeling, Edinburgh; 16. John M. Shaw, Inverness; 17. A. Gordon Cairns, Edinburgh; 18. A. W. C. Menzies, Edinburgh; 19. Rosa Stoltz, Liberton; 20. Donald Fraser, Dalbeattie.

COMPOSITION PRIZE.—William Dunbar and William Rennie—equal.

HISTORY PRIZE.—William Dunbar and William Rennie—equal.

HONOURABLE MENTION.—James S. Ross.

HISTORY PRIZE (*Special Subject*).—William Rennie.

HONOURABLE MENTION.—William Dunbar, R. C. S. Keith, and James S. Ross—equal.

JUNIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. D. G. Macnaughten Leith, Dundee (*Medallist*); 2. George Wilkie, Leven.

SECOND-CLASS CERTIFICATES OF MERIT.—3. Robert D. S. Grant, Wick; 4. Margaret C. W. Young, Edinburgh; 5. Kenneth Cameron, Inverness; 6. C. E. Foster, Newcastle, and G. Scott Phythian, Leeds—equal.

History and Literature Prize.—D. G. Macnaughten Leith.
Composition Prize.—D. G. Macnaughten Leith.
Honourable Mention.—George Wilkie.
Grammar Prize.—D. G. Macnaughten Leith.

S. H. BUTCHER, LL.D., *Professor.*

RHETORIC AND ENGLISH LITERATURE.

Class Prizes and First-Class Certificates.—1. Joseph H. Cattanach, Edinburgh; 2. John Lees, Ayr (*Medallists*); 3. John Macaskill, Dingwall; 4. James S. M'Inroy, Dundee, and William Robb, Addiewell—equal; 6. Edith Hooper, Putney; 7. Margaret J. Stewart, Ayrshire; 8. Lilian Graham, Edinburgh; 9. Edith Graham, Edinburgh; 10. Agnes M'Gregor Smith, Edinburgh; 11. Archibald S. Ballantyne, Galashiels, and G. Dundas Craig, Dundee—equal; 13. Charlotte B. Macdonald, Aberdeen; 14. William Maxwell, Arbroath; 15. Colin C. Nicolas, Edinburgh; 16. John Adam Gray, Edinburgh, and John Hourston, Orkney—equal; 18. William G. Brown, Penicuik.

Second-Class Certificates.—19. Donald T. Mackintosh, Kingussie; Æneas Rose, Blair Atholl; and Herbert Smiles, Perthshire—equal; 22. James G. Jamieson, Ayr; 23. Helen B. K. Thomson, Forfar; 24. Alfred G. Hogg, Edinburgh, and Agnes H. Pitcairn, Hawick—equal; 26. Sara G. Croal, Edinburgh, and Elisabeth Gardiner, Edinburgh—equal; 28. George S. Dickson, Newport-on-Tay, and Jean M. Mackie, Dundee—equal; 30. John M. Macmillan, Edinburgh, and Evelyn M. Skelton, Edinburgh—equal; 32. William Porter, Edinburgh, and Donald A. Stewart, Thurso—equal; 34. John Maclean, Forres; 35. Jane Drinnan, Polmont, and James M. Hogge, Edinburgh—equal.

Essay Prizes and First-Class Certificates.—1. Edith Hooper, Putney; 2. John Macaskill, Dingwall (*Medallists*); 3. William P. Borland, Prestonpans, and Alfred G. Hogg, Edinburgh—equal; 5. J. S. Begg, Edinburgh; Joseph H. Cattanach, Edinburgh; Elisabeth Gardiner, Edinburgh; John Lees, Ayr; and Charlotte B. Macdonald, Aberdeen—equal.

Second-Class Certificates.—10. Donald T. Mackintosh, Kingussie, and Colin C. Nicolas, Edinburgh—equal; 12. James S. M'Inroy, Dundee, and Herbert Smiles, Perthshire—equal; 14. Sara G. Croal, Edinburgh; William Porter, Edinburgh; and Evelyn M. Skelton, Edinburgh—equal; 17. Margaret J. Stewart, Ayrshire; 18. William G. Brown, Penicuik, and James C. Leighton, Dundee—equal; 20. Archibald S. Ballantyne, Galashiels, and Lilian Graham, Edinburgh—equal; 22. Æneas Rose, Blair Atholl; 23. Anne Joanna Bisset, Arbroath; Walter A. Forsyth, Galashiels; John M. Macmillan, Edinburgh; Agnes M'Gregor Smith, Edinburgh; and Helen B. K. Thomson, Forfar—equal.

Prize for Verse.—Donald T. Mackintosh, Kingussie.

HONOURS CLASS (THEORY OF PROSE AND VERSE). — PRIZE AND FIRST-CLASS CERTIFICATE.—George Douglas Shepherd, Ecclesmachan (*Medallist*).

SECOND-CLASS CERTIFICATE.—Emily M. Milligan, Aberdeen.

GEORGE SAINTSBURY, M.A., *Professor*.

OLD AND MIDDLE ENGLISH.

HONOURS CLASS.

FIRST-CLASS CERTIFICATE.—1. G. Douglas Shepherd, Ecclesmachan (*Medal.*)

SECOND-CLASS CERTIFICATE.—2. Emily M. Milligan, Aberdeen.

ENGLISH LITERATURE (ELIZABETHAN.)

HONOURS CLASS.

FIRST-CLASS CERTIFICATES.—1. G. Douglas Shepherd, Ecclesmachan (*Prize*); 2. Emily M. Milligan, Aberdeen.

SECOND-CLASS CERTIFICATES.—3. Louisa R. Boyd, Edinburgh; 4. C. Cuninghame Watson, Edinburgh.

G. GREGORY SMITH, M.A., *Lecturer*.

FRENCH.

ORDINARY CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES.—1. Andrew Hunter, M.A., Edinburgh (*Medallist*); 2. C. M. Campbell, Edinburgh, and Sophie Palmer, Yorkshire—equal; 4. Margaret Gray, Edinburgh; 5. Alexander Flint, Edinburgh.

FIRST-CLASS CERTIFICATES.—6. Ian Spiganovicz, Russia, and F. André Germond, Basutoland—equal; 8. Isabella Black, Edinburgh; 9. Richard Currall, Leith; 10. Robert V. Clark, Edinburgh; 11. Jessie Linton, Edinburgh; 12. Agnes Smith, Edinburgh; 13. Marion Ridpath, Edinburgh; 14. Annie Mackay, Edinburgh; 15. Isabella Ogilvie, Edinburgh.

SECOND-CLASS CERTIFICATES.—16. Amy Thomson, Edinburgh; 17. Davidson Strath, Edinburgh; 18. Chrissie Ross, Edinburgh; 19. C. B. Shepherd, England; 20. Grace Matthew, Corstorphine; 21. Mary Smith, Edinburgh; 22. Williamina Sinclair, Scotland.

CH. SAROLEA, Ph.D., D.Litt., *Lecturer*.

GERMAN.

ORDINARY CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES.—1. Mary Tweedie (*Medallist*); Jessie A. Linton; 3. Helen Cameron.

First-Class Certificates.—4. Mary K. Anderson; 5. Jane A. Black.

Second-Class Certificates.—6. Alice Paterson; 7. Wm. Davois Bowden; 8. J. A. M'Kechnie; 9. Marion J. G. Ridpath; 10. Richard T. Currall.

OTTO SCHLAPP, *Lecturer.*

SENIOR SANSKRIT.

1. W. D. Proudfoot, *Class Medal, First-Class Certificate, and Muir Prize* of £3, 3s.; 2. S. G. Campbell, *First-Class Certificate and Muir Prize* of £2, 2s.; 3. K. N. Knox, *First-Class Certificate.*

J. EGGELING, Ph.D., *Professor.*

CELTIC LANGUAGES AND LITERATURE.

CELTIC CLASS.

Prizes and Certificates.—1. Donald Lamont, Tiree (*Medallist*); 2. Norman Campbell, M.A., Lochbroom.

Certificate of Merit.—Dugald Macfarlane, Tiree.

ADVANCED CELTIC CLASS.

Prize and Certificate.—1. Donald Lamont, Tiree (*Medallist*).

Certificate of Merit.—Donald Maclean, Applecross.

GAELIC CLASS.

Prizes and Certificates.—1. Alex. M. Macleod, Strontian (*Medallist*); 2. Roderick Mackenzie, Lewis; 3. James J. Macpherson, Kingussie; 4. Arch. D. Cameron, Conon Bridge; 5. George A. Stalker, B.D., Argyleshire.

Special Prizes.—£10, 10s., given by the Highland Society of London—Donald Lamont. Prizes given by the Celtic Union, Edinburgh—1. A. M. Macleod; 2. Mrs M. MacEwan, Edinburgh. Prize given by the Gaelic Society of Glasgow (for distinction in Celtic Philology)—Donald Lamont. Book prizes, given by John Mackay, Esq., Hereford, for Essays written in Scottish Gaelic—Celtic Class—Norman Campbell, M.A.; Donald Lamont. Gaelic Class—Roderick Mackenzie.

A Special Prize will be given in Session 1896-97 for the Best List of Provincial Words and Phrases supplied by a member of any of the Classes. The paper to be given in by December 31st 1896.

DONALD MACKINNON, M.A., *Professor.*

LOGIC AND METAPHYSICS.

ADVANCED CLASS—METAPHYSICS.

Prizes and First-Class Certificates.—1. Frances H. Melville, Edinburgh (*Bruce of Grangehill and Falkland Prize and Medal*).

Special Prize.—Alexander Darroch, Greenock.

JUNIOR CLASS—LOGIC AND PSYCHOLOGY.

PRIZES AND FIRST-CLASS CERTIFICATES. — 1. D. H. Macgregor, Dumfries; 2. William Husband, Edinburgh; 3. Lilias A. G Fraser, Edinburgh (*Medallists*); 4. A. B. Keith, Joppa; 5. J. Adam Gray, Edinburgh; 6. Agnes E. F. Allardice, Edinburgh, and A. B. Taylor, Inverness—equal; 8. Herbert Smiles, Edinburgh; 9. G. S. Dickson, Newport; 10. Alexander Flint, Edinburgh; 11. M. N. G. Fallas, Dumfries, and Peter T. Hall, Edinburgh—equal; 13. T. M. Forsyth, Leith; 14. A. S. Ballantyne, Galashiels, and C. C. Nicolas, Devonshire—equal; 16. H. C. Duncan, Edinburgh, and W. H. Fraser, Edinburgh—equal.

SECOND-CLASS CERTIFICATES.—18. A. S. Crichton, Arbroath, and Sara G. Croal, Edinburgh—equal; 20. Donald Lamont, Tiree; 21. W. P. Borland, Prestonpans; 22. Edith Hooper, South Wales; 23. Maggie S. Maiden, Kirkcaldy; 24. Elizabeth A. Duncan, Edinburgh; 25. J. W. Stewart, Edinburgh; 26. George Brown, Hawick; 27. William Bryce, Dundee; 28. Michael Oldham, Edinburgh; 29. J. M. Doig, Edinburgh; 30. M. Amy S. Thomson, Edinburgh; 31. Isabella C. Black, East Calder.

ANDREW SETH, LL.D., *Professor.*

MORAL PHILOSOPHY.

ADVANCED CLASS.

1. Frances H. Melville, Edinburgh (*Medallist* and "Elizabeth Hamilton Prize"); 2. James R. M'Lean, Leith.

HONOUR IN EXAMINATIONS.—Alexander Darroch, Greenock.

ORDINARY CLASS.

PRIZES.—1. J. W. Hamilton Smith, Edinburgh; 2. Charles N. Campbell, Edinburgh; Bruce M'Ewan, Stonehaven; George C. Rankine, Edinburgh; and Alfred G. Hogg, Edinburgh—equal (*Medallists*); 6. Alice Paterson, Edinburgh; 7. Francis Esquilant, Penicuik.

FIRST-CLASS HONOURS CERTIFICATES.—8. Helen Macfie, Whithorn, and William Guthrie, Leven—equal; 10. Æneas Rose, Blair Atholl; 11. John Macfarlane, Prestonkirk; 12. C. R. Lowden, Kirriemuir; 13. Agnes H. Pitcairn, Hawick; 14. James H. Michie, Perth; 15. Maggie S. Maiden, Kirkcaldy; 16. John Smart, Edinburgh; 17. John Hourston, Orkney; 18. William M. Low, Leith; 19. William Robb, Addiewell; 20. Thomas A. Fraser, Leith; 21. Katherine G. Lowson, Edinburgh.

SECOND-CLASS HONOURS CERTIFICATES.—22. William C. B. Munro, Thurso; 23. T. M. Forsyth, Leith, and Donald Lamont, Tiree; 24. John D. Gillam, Edinburgh; 25. Colin C. Nicolas, Edinburgh; 26. William Maxwell, Arbroath; 27. Gavin Millar, Stonehouse; 28. Colin S. M. Brown, Shetland; 29. James W.

Noble, Edinburgh, and George M. Macdougall, Oban—equal; 31. Grace F. Matthew, Corstorphine; 32. A. B. Noble, Edinburgh; 33. J. A. Kyd, Broughty Ferry: 34. John Chalmers, Bathgate; 35. Mary G. Cook, Closeburn.

H. CALDERWOOD, LL.D., *Professor.*

COMMERCIAL AND POLITICAL ECONOMY AND MERCANTILE LAW.

PRIZES.—1. Francis Dewar, Ratho (*Medal and Merchant Company's Prize of £10, 10s.*); 2. Robert Whyte, M.A., Edinburgh (*George Watson's Prize*); 3. Donald Banks, Wigtownshire (*Daniel Stewart's Prize*); 4. William Fowler, Hawick, and C. C. Watson, Edinburgh—equal; 6. Frank Duncanson, Burntisland; O. F. Lumsden, Edinburgh; A. W. Mitchell, M.A., Dunfermline, and Herbert Smiles, Perthshire—equal; 10. James D. M'Leod, Burntisland, and James Muir, Edinburgh—equal.

HONOURS CERTIFICATES.—12. John Chalmers, Bathgate; 13. John Maclean, Forres, and David Reid, Wick—equal; 15. C. M. Campbell, Edinburgh; 16. W. H. Prentice, Edinburgh; 17. Campbell Brown, Edinburgh; 18. Alex. Hume, Caithness; 19. R. Young, Edinburgh; J. B. Woodburn, Belfast; and J. Slight, Edinburgh—equal; 22. H. J. Lindsay, Edinburgh; 23. W. Maxwell, Arbroath; 24. T. A. Fraser, Leith.

ESSAYS.—1. John Row-Fogo, Perthshire (*Prize*); 2. Robert Whyte, M.A.; 3. Francis Dewar; 4. F. Duncanson and O. F. Lumsden—equal.

HONOURABLE MENTION FOR TWO EXAMINATIONS. — John F. Romanes, Dalkeith.

J. SHIELD NICHOLSON, D.Sc., *Professor.*

THEORY, HISTORY, AND ART OF EDUCATION.

MEDAL AND FIRST-CLASS CERTIFICATE.—Robert W. Buchanan, M.A.

FIRST-CLASS CERTIFICATES AND PRIZES.—Miss C. S. J. Cameron; Miss Margaret Drummond, M.A.; Miss Louisa Milne, Miss Elizabeth Stevenson — *all equal* (alphabetically arranged); Mr J. F. Hair, Mr Arch. Milne, Miss M. L. Thomson, Miss Anna M. Warnock.

FIRST-CLASS CERTIFICATES.—Miss M. Ferguson, Miss Edith Harcus, Miss M. S. Jack, Mr Mathew Ketchin.

S. S. LAURIE, LL.D., *Professor.*

MATHEMATICS.

ADVANCED HONOURS CLASS.

FIRST-CLASS CERTIFICATES.—1. M. C. M'Alpin, London (*Medallist*); A. Brown, Edinburgh.

SECOND-CLASS CERTIFICATES.—D. M. Aitken, Edinburgh; J. S. Begg, Edinburgh; L. O. Critchley, Inverness; *J. A. Macdonald, Inverness; G. Robertson, Edinburgh; *A. D. Russell, Edinburgh; *W. Thomson, Edinburgh.

* Attending for a second time.

INTERMEDIATE HONOURS CLASS.

FIRST-CLASS CERTIFICATES.—1. J. M. Low, Leith (*Medallist*); E. M. Anderson, Edinburgh; R. Bell, Dumfries; J. B. Meiklejohn, Thurso; J. T. Young, Edinburgh.

SECOND-CLASS CERTIFICATES.—D. Banks, Stranraer; G. Ednie, Edinburgh; J. Lornie, Perth; W. E. Malherbe, Cape Colony; G. A. Russell, Dundee.

SENIOR CLASS.

PRIZES.—1. R. H. Macnair, Edinburgh; 2. J. Lochhead, Earlston (*Medallists*); 3. D. Drysdale, Edinburgh; 4. R. D. Bell, Edinburgh; 5. Miss M. Forrest, Edinburgh; 6. Miss J. C. Thomson, Rothesay; 7. J. Melville, Edinburgh; 8. H. Burdon, Edinburgh; 9. R. Horn, Edinburgh, and D. M. Johnston, Edinburgh —equal; 11. A. Hunter, Edinburgh.

R. Norrie, Dundee, obtained a First-Class Certificate of Merit (would have obtained the Second Prize had he been attending for the first time).

SECOND-CLASS CERTIFICATES.—A. F. Black, East Calder; P. L. Cattanach, Edinburgh; A. S. Crichton, Arbroath; J. A. Davidson, Edinburgh; H. C. Duncan, Edinburgh; A. J. Forrest, Edinburgh; W. Guthrie, Leven; J. P. Longstaff, Edinburgh; Miss E. W. Menzies, Inverkeithing; J. H. H. Pirie, Aberdeen; W. Robertson, Trinity; Miss B. H. A. Robson, Edinburgh: A. Sharp, Galashiels; Miss W. N. Sinclair, Thurso; S. F. Stewart, Largs; Miss M. C. Watson, Kirkcudbright; J. Yuill, Kirriemuir.

The Newton Bursary in Senior Mathematics has been awarded to R. Horn.

JUNIOR CLASS.

PRIZES.—1. A. Milne, Edinburgh (*Medallist*); 2. J. T. Kerr, Newcastle; 3. J. Tullis, Leuchars; 4. Miss H. A. Lawson, Alloa; 5. W. A. Mowat, London.

SECOND-CLASS CERTIFICATES.—E. H. Calvert, Annan; J. A. Fotheringham, Orkney; Miss H. Hoyle, Rochdale; J. O. Lumsden, Prestonkirk; J. L. Peters, Dundee; Miss W. Smith, Ballater; G. Wilkie, Leven; Miss M. G. Williamson, Allahabad.

The Kelland Prize, open to members of the Class of the previous winter session, was awarded to A. Sharp, Galashiels.

G. CHRYSTAL, LL.D., *Professor.*

NATURAL PHILOSOPHY.

ORDINARY CLASS—HIGHER DIVISION.

PRIZES AND FIRST-CLASS CERTIFICATES. — 1. R. H. Macnair, Douglas (*Medallist*); 2. J. Lochhead, Earlston; 3. D. H. MacGregor, Dumfries.

SECOND-CLASS CERTIFICATE.—4. A. B. Keith, Joppa.

LOWER DIVISION.

PRIZES AND FIRST-CLASS CERTIFICATES.—R. L. Wilson, Dundee; 2. C. Anderson, Stenness; 3. James F. Ross, Aylth (*Medallists*); 4. R. D. Bell, Edinburgh, and Miss J. C. Thomson, Rothesay—equal; 6. Miss H. Cameron, Arbroath; and A. Sharp, Galashiels—equal; 8. John Ross, Edinburgh; 9. W. C. Douglas, Sunderland, D. Johnstone, Edinburgh, and P. Ward, Edinburgh—equal; 12. Miss M. T. Stewart, Hamilton; 13. A. S. Crichton, Arbroath, and J. H. H. Pirie, Aberdeenshire—equal; 15. K. Blaikie, Edinburgh, and D. Drysdale, Edinburgh—equal.

SECOND-CLASS CERTIFICATES.—17. A. J. Forrest, Edinburgh; 18. Miss H. Macfie, Whithorn, and T. Paterson, Edinburgh—equal; 20. F. Duncanson, Burntisland; 21. E. Blades, Armadale; 22. J. Aim, Deerness; 23. Miss C. J. Drummond, Edinburgh; 24. W. H. Fraser, Edinburgh, and T. S. Welsh, Edinburgh—equal; 26. M. N. G. Fallas, Dumfries; 27. James Melville, Edinburgh; 28. W. Bryce, Dundee, and W. E. C. Dickson, Edinburgh—equal; 30. J. D. M'Leod, Burntisland, and W. G. Porter, Kumbakonum—equal; 32. Miss N. R. Duncan, Kinross; 33. H. C. Duncan, Edinburgh; 34. James Clark, Cramond, and W. Mackenzie, Cromarty—equal.

PRIZE FOR THE ORDINARY EXAMINATIONS.—R. L. Wilson.

ADVANCED CLASS.

FIRST-CLASS CERTIFICATES.—1. M. C. M'Alpin, London; 2. Miss J. C. Macmillan, Edinburgh.

SECOND-CLASS CERTIFICATES.—3. J. S. Begg, Perth, and A. Brown, Edinburgh—equal; 5. H. A. Braine, Leeds, and A. D. Russell, Edinburgh—equal; 7. L. O. Critchley, Inverness, and W. Jeffrey, Blaydon-on-Tyne—equal.

PHYSICAL LABORATORY.

HIGHLY COMMENDED—*Summer* 1895.—G. Ednie (*Donald Fraser Bursary*); D. H. Macgregor, J. T. Young (*Neil Arnot Scholarship*). *Winter* 1896.—Miss Bisset, C. E. Fawsitt.

P. G. TAIT, M.A., *Professor.*

NATURAL PHILOSOPHY.

INTERMEDIATE HONOURS.

FIRST-CLASS HONOURS.—D. M. Aitken, Singapore (*Medallist*); 2. E. M. Anderson, Falkirk.

SECOND-CLASS HONOURS.—3. Richard Bell, Dumfries; J. B. Meiklejohn, Thurso; and J. T. Young, Edinburgh—equal.

C. G. KNOTT, D.Sc., *Lecturer*.

HISTORY.

HONOURS COURSE.

"Wycliffe: His Influence," &c.

PRIZES AND HONOURS.—1. George Douglas Shepherd; 2. Bessie B. Bird; 3. Louisa R. Boyd and Emily M. Milligan—equal.

JOHN KIRKPATRICK, LL.D., *Professor*.

HISTORY.

HONOURS COURSE.

"England and Europe, 1815-78."

CLASS I.—1. Alex. Mair, Irvine (*Medallist*).

CLASS II.—2. Bessie B. Bird, Berwickshire, and Lilian A. Johnstone, Edinburgh—equal; 4. Annie G. Smith, Edinburgh.

ORDINARY COURSE.

"General British History."

CLASS I.—1. John Tait, Sandwick, Shetland (*Medallist*); 2. Alex. Robb, Armadale; 3. Joseph H. Cattanach, Edinburgh, and James F. Ross, Alyth—equal.

CLASS II.—5. Bessie B. Bird, Berwickshire; 6. G. Dundas Craig, Dundee; Donald T. Mackintosh, Kingussie; and John Matheson, Falkirk—equal; 9. Will. G. Brown, Penicuik; George S. Dickson, Newport-on-Tay; Richard H. Moar, Stromness, Orkney; Michael Oldham, Edinburgh; and Will. Murray Stuart, Edinburgh—equal; 14. James M. Hogge, Edinburgh; Marshall N. G. Fallas, Dumfries; and David Robertson, Stranraer—equal.

G. W. PROTHERO, D.Litt., *Professor*.

FINE ART.

CLASS MEDAL AND FIRST PRIZE.—Wm. A. Curtis.

SECOND PRIZE.—Cecilia Dickie.

THIRD PRIZE.—Oswald Chambers.

COUSIN PRIZE FOR ESSAYS.—Thomas J. Burnett.

HIGHLY COMMENDED FOR ESSAYS.—Oswald Chambers, Wm. A. Curtis, Cecilia Dickie.

The above receive FIRST-CLASS CERTIFICATES.

SECOND-CLASS CERTIFICATES.—T. K. Bonnar, Victor Caldwell, J. Crerar (absent part of the session through illness).

HONOURS CLASS.

Classical Archæology.

PRIZE.—William D. Ross, M.A.

G. BALDWIN BROWN, M.A., *Professor*.

Graduation in Arts.[1]

Candidates who commenced attendance on qualifying Classes before 1st October 1892 are referred to the CALENDAR *for 1895-96, or previous* CALENDARS.

The Degree admits to professional Study, to the Army, &c. It also qualifies for Masterships of Public Schools, subject to an examination in the methods of instruction, and three months' attendance in a Public School for the practice of teaching. Those who take the Schoolmaster's Diploma are now exempted from this Examination.

ACADEMICAL YEAR.

I. The Academic year commences on the first day of October. The winter session opens about the middle of October, and includes not less than twenty teaching weeks. The summer session opens about the beginning of May, and includes not less than ten teaching weeks.

II. The Curriculum for the degree of Master of Arts (M.A.) extends over not less than three winter sessions, or two winter sessions and three summer sessions.

PRELIMINARY EXAMINATION.[2]

III. (1) Before entering on the Curriculum (subject to the *proviso* contained in Section IV., Sub-section 1) each student must pass a Preliminary Examination in the following subjects :—

1. English.
2. Latin or Greek.
3. Mathematics.
4. One of the following :—Latin or Greek (if not already taken), French, German, Italian,[3] Dynamics.

(2) The examination must be passed in the matters and on the standards hereinafter defined ; but there is a higher and a lower standard in Latin, Greek, and Mathematics.

Candidates must pass on the higher standard in at least one of these three subjects, and may pass on the lower standard in either or both of the remaining two ; subject always to the conditions relative to attendance contained in Section IV. hereof.

(3) English includes Grammar and Composition, and the outlines of Geography and British History, and the standard must not be lower than that presently adopted for the Higher Grade Leaving Certificate of the Scotch Education Department.

(4) Latin and Greek comprise grammatical questions, translation into English from Latin or Greek authors not previously prescribed, and translation of plain passages or easy sentences from English into Latin or Greek. The higher standard must not be lower than that formerly adopted in the examination for a Curriculum of three sessions, or for the Higher Grade Leaving Certificate of the Scotch Education

[1] The annual amount of Matriculation, Class Fees, &c., of the regular course in Arts may be estimated at about £10, 10s.

[2] See also pages 128-131 inclusively.

[3] See Appendix, page 766.

Department, and the lower standard must not be lower than that presently adopted for the Lower Grade Leaving Certificate of the said Department.

(5) French, German, and Italian comprise grammatical, literary, and easy philological questions, translation into English from French, German, or Italian authors not previously prescribed, and translation from English into French, German, or Italian; and the standard must not be lower than that presently adopted for the Higher Grade Leaving Certificate of the Scotch Education Department.

(6) Mathematics on the lower standard comprises—(1) Arithmetic, including Vulgar and Decimal Fractions, Proportion, Percentage, Square Root, Simple Interest; (2) Algebra, including Fractions, Factors, Square Root, Equations of the First Degree, Simultaneous Equations of the First Degree, Easy Quadratic Equations, Problems leading to the above Equations; (3) Geometry—Euclid, Books I., II., and III. (or their equivalents), with easy deductions. Demonstrations other than Euclid's will be accepted if they assume no propositions which in Euclid's order are subsequent to the proposition under consideration.

(7) Mathematics on the higher standard, in addition, comprises Euclid, Books IV., VI., and the first twenty-one propositions of Book XI. (or their equivalents), with deductions, Quadratic Equations, Trigonometry to the solution of Triangles inclusive, and the use of Logarithmic Tables.

(8) Dynamics means the Elementary Statics and Kinetics of Solids, Liquids, and Gases.

(9) A candidate must pass in all the required subjects at one or not more than two examinations, but may offer himself for re-examination as often as may be necessary to satisfy this condition.

IV. (1) Attendance on any class does not qualify for graduation, unless the whole Preliminary Examination has been passed. But any Student who has passed in Latin, Greek, or Mathematics on the higher standard may attend a qualifying class in such subject or subjects without having passed in the other subjects of the examination, provided always that (*a*) no candidate will be allowed to present himself for examination in any subject qualifying for graduation until he has passed the whole Preliminary Examination, and (*b*) no Student will be admitted to a degree in Arts unless he has attended qualifying classes in the University granting the degree, or in another Scottish University, as provided by Section XXV. hereof, for three Academic years after he has completed his Preliminary Examination.

(2) Attendance on a class in any language included in the Preliminary Examination does not qualify for graduation, unless the candidate, before entering the class, has passed the Preliminary Examination in that subject, and on the higher standard where a double standard is provided. He may, for that purpose, attend any Preliminary Examination held during the course of his study, taking only the paper

set in that subject ; provided always that the provisions of the subsection immediately preceding have been satisfied.

(3) Attendance on a class in any language not included in the Preliminary Examination will not qualify for graduation, unless the candidate has previously passed an examination in that language on a standard as nearly as possible equivalent to the higher standard of the languages included in the Preliminary Examination.

(4) Attendance on a class of Mathematics or Natural Philosophy will not qualify for graduation unless the candidate, before entering the class -in addition to the examination in Mathematics on the Lower Standard required of all students—has passed an examination in the following subjects :—

(*a*) Euclid : Book VI., Propositions 1-19, or Geometry equivalent thereto.

(*b*) Algebra : Quadratic Equations, Ratio and Proportion.

(*c*) The Trigonometry of Right-angled Triangles.

(5) A student, who, having passed the Arts Preliminary Examination in accordance with these Regulations, has thereafter obtained a certificate of attendance on a qualifying class of Mathematics, will not be required to pass any further examination in Mathematics as a condition of entering on the course of study for graduation in Science.

V. (1) The Preliminary Examination is held at each University twice in each year, and is conducted in writing.

(2) The Joint Board of Examiners has power to accept the Higher Grade Leaving Certificate of the Scotch Education Department in any subject as an equivalent for the Preliminary Examination in that subject ; and to accept the Lower Grade Leaving Certificate of the said Department as an equivalent for the Preliminary Examination on the lower standard in Latin, Greek, and Mathematics ; provided they are satisfied that the standard of the examination, at which the said certificates were granted, is not lower than that required by these Regulations.

(3) The Joint Board has power to determine what examinations, if any, other than those for the Leaving Certificates of the Scotch Education Department may be accepted as equivalent to the Preliminary Examination in whole or in part, provided they are satisfied that such other Examinations are in fact equivalent thereto.

ORDINARY DEGREE.

VI. Candidates for the ordinary degree of Master of Arts may follow the Curriculum and take their degree in the subjects recognised for graduation under the Universities (Scotland) Act, 1858, subject always to the preceding provisions of these Regulations ; or they may vary the Curriculum for graduation under the regulations contained in the immediately succeeding sections.

VII. (1) Candidates must attend full courses in at least seven subjects, and are examined on these subjects.

(2) Of these subjects four must be (*a*) Latin or Greek (not modern Greek); (*b*) English or a Modern Language (French, German, Italian, or Spanish), or History; (*c*) Logic and Metaphysics, or Moral Philosophy; (*d*) Mathematics or Natural Philosophy.

(3) The remaining subjects may be selected by the candidate from the Departments specified in Section IX. of these Regulations, under the following condition :—That the whole subjects taken must include either (*a*) both Latin and Greek (not modern Greek), or (*b*) both Logic and Moral Philosophy, or (*c*) any two of the following three subjects,—Mathematics, Natural Philosophy, and Chemistry.

VIII. (1) Each of the subjects must be studied in a full course of not less than one hundred meetings of the class on separate days, except in cases where the Senatus, with the approval of the University Court, have sanctioned, as qualifying for graduation, half courses of not less than fifty meetings on separate days; or where the Senatus, with the approval of the said Court, may, having regard to the nature of the subject, sanction full courses of less than one hundred or half courses of less than fifty meetings respectively.

(2) Two half-courses are held to be equivalent to a full course in such cases as the Senatus, with the approval of the University Court, may determine, and under such regulations as may from time to time be made for that purpose.

(3) Where a subject is taught in a practical class, as well as in a systematic class, the Senatus, with the approval of the University Court, regulates the course of study and determines the relative proportion of lectures and laboratory or practical work.

IX. The Departments of Study for graduation in Arts in each University, if adequate instruction is provided, include the following subjects, with such additions or modifications in any University as may hereafter be made by Ordinance of the University Court :—

1. *Language and Literature.*

Latin.	Italian.
Greek.	Sanskrit.
Modern Greek.	Hebrew.
English.	Arabic or Syriac.
French.	Celtic.
German.	

2. *Mental Philosophy.*

Logic and Metaphysics.	Education (Theory, History, and Art of).
Moral Philosophy.	Philosophy of Law.
Political Economy.	

3. *Science.*

Mathematics.	Zoology.
Natural Philosophy.	Botany.
Astronomy.	Geology.
Chemistry.	

4. *History and Law.*

History.	Constitutional Law and History.
Archæology and Art (History of).	Roman Law.
	Public Law.

X. Candidates who produce certificates that they have satisfied all the conditions prescribed by these Regulations, and who have passed the necessary examinations, are entitled to receive the ordinary degree of M.A. on payment of the fees required.

CIVIL SERVICE COMMISSION EXAMINATIONS.

Candidates for Graduation in Arts with Honours are reminded that most of their subjects are admissible also in the Public Examinations held by the Civil Service Commission and other Public Examinations, on the results of which many important posts in India and at home are awarded each year. A committee of the Senatus has been formed for the purpose of directing the studies of Students who have these examinations in view. Those who desire advice or information on this subject should apply to Professor Hardie, Convener of the above-mentioned Committee.

DEGREE WITH HONOURS.

XI. (1) The degree of M.A. may be taken with Honours in any of the following Groups, in which Honours Classes have been established in at least two subjects :—

(*a*) Classics (*i.e.* Latin and Greek, with optional subjects such as Comparative Philology, Ancient Philosophy, and Classical Archæology).
(*b*) Mental Philosophy.
(*c*) Mathematics and Natural Philosophy.
(*d*) Semitic Languages.
(*e*) Indian Languages.
(*f*) English (Language, Literature, and British History). English Literature is the chief subject of this group, the linguistic and historical subjects being regarded as subsidiary.
(*g*) Modern Languages and Literature.
(*h*) History.

(2) Every candidate must take up at least five subjects. Two of these subjects, under separate Professors or Lecturers, must be selected from the candidate's Honours Group; and the five subjects must include one from each of the Departments of Language and Literature, Mental Philosophy, and Science, set forth in Section IX. of these Regulations.

(3) Every candidate must attend seven Classes, taking two Classes (one of which must be an Honours Class) in each of his Honours subjects.

(4) A candidate who has obtained Honours in any one Group may, before graduating, present himself again for examination in a second Honours Group. In such a case, he will not be required to attend

more than two additional Classes, which must be Honours Classes, in the second Group.

(5) The examination in the subjects comprised in the candidate's Honours Group must be of a higher standard than that required for the ordinary degree of M.A. In his other subjects the standard will be that required for the ordinary degree.

(6) The Senatus, subject to the provisions of Sections XVI. to XX. of these Regulations, from time to time determines what subjects are comprised in each Group, what subjects may be taken in half-courses, and in which Group they may be taken: Provided that no new Group shall be instituted except by Ordinance of the University Court.

(7) The provisions of Section VIII. of these Regulations applies to Candidates for Honours; but, in their case, not fewer than fifty meetings, on separate days, extending over an entire winter session, will constitute a full course for an Honours Class; and not fewer than twenty-five meetings on separate days, extending over half a winter session, or an entire summer session, will constitute a half course.

XII. (1) Every candidate must include Latin, or Greek, either in his Honours Group or as one of the subjects in which the standard of examination is that required for the ordinary degree of M.A.

(2) Greek is compulsory for candidates for Honours in Mental Philosophy.[1]

(3) Candidates for Honours in English, or Modern Languages and Literature, or History (Groups *f*, *g*, *h* of Section XI. hereof) must include within the whole subjects taken for their degree (*a*) Logic and Metaphysics or Moral Philosophy, and (*b*) Mathematics or Natural Philosophy.[1]

XIII. (1) The whole examination in the candidate's Honours Group must be taken at one time, and the whole examination necessary for graduation with Honours must be taken within five years from the date of the candidate's first matriculation after having passed the Preliminary Examination, unless that period shall be extended by the Senatus on special cause shown; and in every such case the Senatus must make a report to the University Court setting forth the reasons for the extension.

(2) Candidates for Honours may be examined, at any time during their Curriculum, in the three subjects in which the standard of examination is that required for the ordinary degree of M.A.

XIV. (1) A candidate who has passed the examinations necessary for the ordinary degree of M.A., but who has not yet graduated, may present himself for Honours within five years from the date of his first matriculation after having passed the Preliminary Examination, and will not be required to attend further classes:—subject always to the provisions of Section XII. hereof.

(2) No one is allowed to present himself a second time as a candidate for the degree of M.A. with Honours, who, upon examination, has failed to obtain Honours.

[1] See Appendix, p. 766.

(3) A candidate is held to have presented himself who has notified his name for examination in accordance with the University regulations. But it will be in the power of the Senatus to relax this rule on special cause shown; and in every such case the Senatus must make a report to the University Court setting forth the reasons for the relaxation.

XV. (1) In each Group there are three Grades of Honours, to be denominated respectively the First, Second, and Third Class. The names of the candidates entitled to Honours in each class are arranged in alphabetical order.

(2) For the degree of M.A. with Honours a Diploma is given setting forth the subjects in which he has taken Honours.

BOARDS OF STUDIES.

XVI. The Senatus of each University from time to time institutes Boards of Studies corresponding as nearly as may be to the Departments of Study enumerated in Section IX. of these Regulations.

XVII. Each Board of Studies consists of such Members of the Senatus and Lecturers in the University as the Senatus may from time to time select, and the Senatus appoints one of the Members of the Board to be Convener thereof.

XVIII. Before the end of each winter session each Professor and Lecturer in the said Departments of study must submit to the proper Board of Studies for its approval a syllabus of the subjects and books proposed for the work of his class for the next Academical year (and also a syllabus of the subjects and books to be prescribed for the Examinations for the Ordinary Degree of M.A. in the next Academical year, and for the Honours Examinations in the Academical year next but one). As soon as such approval has been given, these syllabuses must be transmitted to the Faculty of Arts for its consideration. The syllabuses, with such observations as the Faculty of Arts may see fit to make thereon, must then be transmitted to the Senatus for its sanction.

XIX. (1) Before the end of each winter session each Board of Studies must prepare a scheme, defining, for the Academical year next but one following, the classes which are deemed to be Honours Classes, and the subjects and courses of reading for Honours in its Department, and must report the same to the Faculty of Arts for its consideration. The scheme, with such observations as the Faculty of Arts may see fit to make thereon, is then transmitted to the Senatus for its sanction.

(2) Each Board must in like manner make recommendations through the Faculty of Arts to the Senatus in regard to the half-courses which may be sanctioned under these Regulations, and the lectures which may be given on special subjects.

XX. The Principal and the Dean of the Faculty of Arts are *ex-officio* Members of each Board of Studies. The Convener presides, and, in his absence, each meeting appoints its own Chairman, and every Chairman has a deliberative, and, in cases of equality, a casting vote.

GENERAL.

XXI. In the case of a foreign student, whose native language is other than English, the standard required in English in the Preliminary Examination is such as the Joint Board of Examiners deems sufficient. In the case of a student, whose native language is other than European, the Senatus may accept as an alternative to Latin or Greek any other classical language, such as Sanskrit or Arabic, subject always to the provisions of Section IV., Sub-section 3 hereof.

XXII. If a student, before passing the Preliminary Examination, has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class as qualifying for graduation, on condition of his passing the full Preliminary Examination within such time thereafter as the Senatus may appoint; and in every such case the Senatus must make a report to the University Court setting forth the reasons for the relaxation.

XXIII. The examination in all the languages in the Curriculum must, as far as possible, be on the same standard in examinations for the same degree, and will in all cases test the candidate's knowledge of the history and literature of the several countries.

XXIV. A candidate for the degree of M.A. is not deemed to have attended a class as part of the Curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XXV. A student, who has given attendance at classes recognised as qualifying for graduation during one or more sessions in any one or more of the Scottish Universities, may complete his Curriculum by giving attendance during the remainder of his course in another Scottish University, and may proceed to a degree in the latter University in the same way, in all respects as if the previous part of his Curriculum had been taken therein: Provided always that every such student must produce, to the satisfaction of the Senatus of the latter University, certificates of his having passed the Preliminary Examination, and of his attendance at the former University or Universities, and must be examined in all the subjects necessary for a degree of M.A. by the Examiners of the University in which he completes his Curriculum, and in which alone he will be allowed to graduate; and that no such student will be admitted to a degree in any University unless he has given attendance in such University during the last winter session of his Curriculum, and one other winter session or two summer sessions.

XXVI. A candidate for the degree of M.A. with Honours, who has failed to be placed in any class, may, provided that in the opinion of the Examiners he has given evidence of sufficient attainments in any subject for the ordinary degree of M.A., receive from them a certificate of having passed in such subject, which will count *pro tanto* as part of the examination required under the regulations for the ordinary degree of M.A.

XXVII. The degree of M.A. is in no case conferred on persons who have not satisfied the conditions hereinbefore set forth, and is not conferred *honoris causa tantum*.

XXVIII. A student who, at the time these Regulations came into operation, had commenced his course of study with a view to graduation in Arts in any of the Scottish Universities under the regulations in force at the time in such University, may complete his course and become a candidate for the degree of M.A., with or without Honours, in conformity with such regulations. And any such student who has passed the examination hitherto required for admission to a Curriculum of three sessions, if he desire to come under these regulations, is exempted from the Preliminary Examination herein required.

XXIX. Students may attend any classes without having passed the Preliminary Examination within the meaning of these Regulations, but such attendance will not qualify for graduation.

XXX. Attendance on classes in the Faculty of Arts in which the teaching is on the standard at present recognised for the classes hitherto known as junior or middle classes, will in no case qualify for graduation. It is competent for the University Court in each University to discontinue the Junior Classes, or Middle Classes, where such exist, in Latin, Greek, and Mathematics, when, in the opinion of the Court, the provision for Secondary Education in schools throughout the country is sufficient to render such classes no longer necessary.

XXXI. Ordinances numbered 12, 14, 18, and 69 of the Commissioners under the Universities (Scotland) Act, 1858, as altered under the provisions of the said Act, are repealed, in so far as they are inconsistent with these Regulations.

Graduation of Women.

I. It is in the power of the University Court to admit women to graduation.

II. The conditions for graduation are the same for women as for men, subject to the following modifications, which have effect until provision is made for the instruction of women in all subjects qualifying for graduation in which provision is made for the instruction of men :—

(1) Section XXV. of Regulations for Degrees in Arts is not applicable to the graduation of women in Arts.

(2) So long as within the Faculty provision is not made for the instruction of women in any subject qualifying for graduation in which provision is made for the instruction of men, it is in the power of the University Court to admit to graduation women who have received the requisite instruction in that subject in any Scottish University, or from any teacher or in any

Institution, within the University town, recognised for the purposes of graduation by the University Court: Provided always that every candidate for graduation produces evidence of having satisfied the conditions with respect to the Preliminary Examination, and be examined in all the subjects necessary for graduation by the Examiners of the University.

III. So soon as within the University provision is made for the instruction of women in all subjects qualifying for graduation in which provision is made for the instruction of men, the conditions for the graduation of women shall be the same as the conditions for the graduation of men.

IV. (1) Women who may attend classes in the University must matriculate, paying a fee of the same amount as that exigible for other students. (2) Women, who are candidates for graduation but not matriculated students, and who may attend classes within a University town, under the provisions of Section II. (2) hereof, must, at the commencement of each year of such attendance, enrol their names in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by students of the University.

ADDITIONAL REGULATIONS BY THE UNIVERSITY COURT.[1]

Any Woman who has received the requisite instruction in Chemistry, Botany, and Zoology in any Scottish University, or in the Edinburgh School of Medicine for Women, Surgeon Square, Edinburgh, or in the Medical College for Women, Chambers Street, Edinburgh, will (subject to the provisions of Ordinance No. 18, General No. 9, Regulations for the Graduation of Women,[2] &c.) be admitted to Examination in these subjects for Graduation in Arts. Women may attend within the University the advanced Courses in Botany and Zoology.

Any Woman, not a Matriculated Student of the University, availing herself of the permission to attend the Courses on Chemistry, Botany, or Zoology, at the above-named Schools of Medicine in Edinburgh, with a view to Graduation in Arts, must, at the commencement of each year of such attendance, enrol her name in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation

[1] Extra Academical Teachers in Edinburgh, whose Lectures qualify Women Students for Graduation in Arts in this University:—
T. W. Drinkwater, Ph.D., Chemistry and Practical Chemistry, 17th December 1894.
J. Arthur Thomson, M.A., Zoology, 17th December 1894.
Robert Turnbull, B.Sc., Botany, 17th June 1895.

[2] See Ordinance Appendix to CALENDAR, 1892-93, page 51.

Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

Regulations for Special Study and Research, for Appointment of Research Fellows, &c.

I. It is in the power of the Senatus Academicus, with the approval of the University Court, to make regulations under which graduates of Scottish Universities, or of other Universities recognised by the University Court for the purposes hereof, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or research, may be admitted to prosecute such study or research in the University.

II. It is the duty of the Senatus Academicus—

(1) To receive and decide upon all applications for admission to prosecute special study or research.

(2) To prepare a list of all persons so admitted (hereinafter referred to as Research Students).

(3) To make regulations for the supervision of their work.

(4) To satisfy themselves from time to time that the Research Students are carrying on their work in the University in a satisfactory manner.

(5) To suspend or exclude from any course any student whose conduct or progress is unsatisfactory.

III. Every applicant for admission must send in to the Senatus Academicus a written application stating any degree or other distinction which he has already obtained, the line of study or research which he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. An application for admission is in the first instance referred by the Senatus to the appropriate Faculty, or to a Committee appointed by the Senatus ; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—

(*a*) That his proposed line of study or research is a fit and proper one ;

(*b*) That he possesses a good general education ;

(*c*) That he is of good character ;

(*d*) That he proposes to prosecute his studies or research during a period to be approved by the Senatus.

The Faculty or the Committee shall make a report to the Senatus upon each application. It is also their duty, subject to the regulations of the Senatus, to provide for the supervision of the Research Student's

work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student is required to matriculate each year, paying the ordinary fee.

VI. Research Students have access to and the use of the University Laboratories and Museums, under such conditions as to payment and otherwise as the University Court, after consultation with the Senatus, may determine.

VII. The title of Research Fellow may be conferred by the Senatus, with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow under the powers of Section XI., Sub-section 8, of Ordinance 27.

VIII. (1) The Research Fellows shall be appointed as aforesaid after consideration of the report or reports submitted in terms of Section IV. hereof.

(2) The title of Research Fellow may be conferred either at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus may determine.

(3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer.

(4) Research Students who have been appointed Research Fellows shall continue to be subject to the conditions above prescribed as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may, subject to the provisions of Section XI., Sub-section 8, of Ordinance 27, provide such sums as it may think fit in aid of the expenses of Special Study or Research.

Regulations for Higher Degrees in Arts and Science.

Degree of D.Sc.

I. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in Mathematics and Natural Philosophy under the conditions prescribed by the Regulations for Degrees in Arts, or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Science (D.Sc.) in the same University after the expiry of five years from the date of their graduation in Arts, under the same conditions as if they held the degree of Bachelor of Science.

II. Research Students within the meaning of the Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows may offer themselves for the degree of D.Sc. of the University in which they have prosecuted some special study or research under those Regulations, although they have not taken the degree of B.Sc. or the degree of M.A. with honours as aforesaid in that University; provided—

(1) That they hold the degree of B.Sc. or M.B. of a Scottish or any recognised University, or a degree of any such University, which the Senatus shall hold to be equivalent to the degree of B.Sc. or to the degree of M.A. with first or second class honours in Mathematics and Natural Philosophy; provided that candidates who hold any such degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of D.Sc., to pass an examination equivalent to an Honours or to a Final Science examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

III. All candidates for the degree of D.Sc. shall present a thesis or a published memoir or work, to be approved by the Senatus on the recommendation of the Faculty of Science; provided that, if required by the Senatus, the candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his thesis, as may from time to time be determined. The thesis shall be a record of original research undertaken by the candidate, and shall be accompanied by a declaration signed by him that the work has been done and the thesis composed by himself.

Degree of D.Phil.

IV. Graduates who have taken the degree of M.A. in any Scottish University with first or second class honours in Mental Philosophy, under the conditions prescribed by Ordinance No. 11 [General No. 6—Regulations for Degrees in Arts], or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Philosophy (D.Phil.) in the same University after the expiry of five years from the date of such graduation.

V. Research Students as aforesaid may offer themselves for the degree of D.Phil. of the University in which they have prosecuted some special study under Ordinance No. 61 [General, No. 23—Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows], although they have not taken the

degree of M.A. with honours as aforesaid in that University; provided—

(1) That they hold the degree of M.A. with first or second class honours in Mental Philosophy of any Scottish University, or a degree of any recognised University, which the Senatus shall hold to be equivalent to such degree with honours as aforesaid; provided that candidates who hold such a degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students, with a view to the degree of D.Phil., to pass an examination equivalent to an honours examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent no less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and produce evidence of satisfactory progress in the special study undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

VI. All candidates for the degree of D.Phil. shall present a thesis or a published memoir or work, which shall be an original contribution to learning, to be approved by the Senatus on the recommendation of a Committee appointed by the Senatus; provided that, if required by the Senatus, a candidate shall also be bound to pass such examination, conducted orally or otherwise, on the subject of his thesis or of his special study as may from time to time be determined. The thesis, or memoir, or work shall be accompanied by a declaration signed by the candidate that it has been composed by himself. If the thesis has not already been published, it shall be published by the candidate in such manner as the Senatus shall approve.

Degree of D.Litt.

VII. Graduates who have taken the degree of M.A. in any Scottish University with first or second class honours in any group other than Mathematics and Natural Philosophy or Mental Philosophy, under the conditions prescribed by Ordinance No. 11 [General No. 6—Regulations for Degrees in Arts], or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Letters (D.Litt.) in the same University after the expiry of five years from the date of such graduation.

VIII. Research Students as aforesaid may offer themselves for the degree of D.Litt. of the University in which they have prosecuted some special study under Ordinance No. 61 [General No. 23—Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows], although they have not taken the degree of M.A. with honours as aforesaid in that University; provided—

(1) That they hold the degree of M.A. with first or second class honours in any group except Mathematics and Natural Philosophy or

Mental Philosophy of any Scottish University, or a degree of any recognised University, which the Senatus shall hold to be equivalent to such degree with honours as aforesaid ; provided that candidates who hold such a degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of D.Litt., to pass an examination equivalent to an honours examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and produce evidence of satisfactory progress in the special study undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

IX. All candidates for the degree of D.Litt. shall present a thesis or a published memoir or work, which shall be an original contribution to learning, to be approved by the Senatus on the recommendation of a Committee appointed by the Senatus ; provided that, if required by the Senatus, a candidate shall also be bound to pass such examination, conducted orally or otherwise, on the subject of his thesis or of his special study as may from time to time be determined. The thesis, or memoir, or work shall be accompanied by a declaration signed by the candidate that it has been composed by himself. If the thesis has not already been published, it shall be published by the candidate in such manner as the Senatus shall approve.

General.

X. Notwithstanding and in supplement of the Regulations as to Examinations, sections XIV. and XV., the Senatus Academicus in each University shall appoint such Professors or Lecturers as it may think suitable to conduct the examination of candidates who may offer themselves under the Regulations for Degrees in Science, or of these Regulations for the Degree of Doctor of Science, Doctor of Philosophy, or Doctor of Letters ; and the University Court shall, after consultation with the Senatus Academicus, appoint an additional Examiner to act along with them. Such additional Examiner shall be a person of recognised eminence in the subject of the thesis, or memoir, or work which is to be submitted for approval. The result of the examination shall be reported to the appropriate Faculty or Committee of Senatus.

XI. The degrees of D.Sc. in Mental Science or D.Sc. in Philology shall no longer be conferred by any Scottish University.

XII. Candidates who have already completed the necessary attendance on classes required for the degree of D.Sc. in Mental Science or D.Sc. in Philology, under regulations hitherto in force in any Scottish University, may proceed to the degree of D.Phil., or of D.Litt., as the case may be, under this Ordinance :—provided such candidates comply with the provisions of Section VI. or Section IX. hereof, as

the case may be, and that a period of not less than five years shall have elapsed from the date of their graduation as M.A.

XIII. The degrees of D.Sc., D.Phil., and D.Litt. shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

The fee to be paid for Examination for each of the degrees of D.Sc., D.Phil., and D.Litt. is ten guineas, payable when the thesis is lodged, and the fee for each re-examination for each of the Degrees is £5, 5s.

Candidates for Examination or Graduation must pay the Matriculated fee for the Academic year.

JOINT BOARD OF EXAMINERS FOR THE SCOTTISH UNIVERSITIES.

A Joint Board of Examiners, who control and supervise the Preliminary Examinations, is appointed annually by the University Courts of the four Scottish Universities, and holds office from 1st February to 31st January in the succeeding year. The Board sits for a year at each University in rotation, viz. :— Edinburgh, Glasgow, Aberdeen, St Andrews. The Principal of the University at which the Board sits is Chairman for the time, and the Secretary of the University Court is Convener.

Members of the Board (which meets at St Andrews) for the current year (1st February 1896 to 31st January 1897) :—

Chairman—Principal Donaldson, LL.D.

Convener—Charles Stuart Grace, Esq., W.S.

Appointed by St Andrews University—Professor P. R. Scott Lang, M.A., B.Sc. (Mathematics and Dynamics); John B. Charles, Esq., M.A. (English); William Menzies, Esq., M.A. (Classics); F. F. Roget, Esq. (Modern Languages).

Appointed by Edinburgh University—Professor Saintsbury, M.A. (English); James C. Smith, Esq., M.A. (Classics); David Beveridge Mair, Esq., M.A. (Mathematics and Dynamics); Otto Schlapp, Esq. (Modern Languages).

Appointed by Glasgow University — Professor Ramsay, LL.D. (Classics); Professor Jack, LL.D. (Mathematics and Dynamics); A. M. Williams, Esq., M.A. (English); Professor Strong (Modern Languages).

Appointed by Aberdeen University—Professor Harrower, M.A.; Professor Grierson, M.A., LL.D.; David Craib, Esq., M.A.; Rev. James Milne, M.A.

The Joint Board from time to time issue Supplementary Regulations for the Preliminary Examination, and set the papers, which are common to all the Scottish Universities. It

also gives instructions to the Examiners with a view to secure adequate and uniform examination.

PRELIMINARY EXAMINATION IN ARTS AND SCIENCE.

In addition to the Regulations, Sections III. to V. inclusively, and the Regulations for Degrees in Science, Sections 1 to 9 inclusively, page 14, the Joint Board have made the following Supplementary Regulations :—

1. English will include Grammar, Composition, Literature, History, and Geography.

(*a*) *Grammar* will include Analysis, Parsing, Derivation, and Correction of sentences.

(*b*) *Composition* will include an Essay and Paraphrasing.

(*c*) *Literature*—(i) In October 1896, will include a general knowledge of the life and works of the greater writers, and a more special knowledge of two or three of these writers.

In October 1896 the subjects prescribed for special study will be Shakespeare's "Henry the Fifth," and Scott's "Fair Maid of Perth."

(ii) In and after April 1897, Literature will comprise a knowledge of certain prescribed books of two or three writers; and the amount of prescribed work will therefore be increased. Questions requiring a general knowledge of the life and works of the greater writers will no longer be set; but one or two questions may be set, giving an opportunity to candidates who have read widely in English Literature to show their knowledge.

The Books prescribed in English Literature are :—

For 1897.
1. Shakespeare : *Coriolanus.*
2. Scott : *Quentin Durward.*
3. Tennyson : *The Princess*, and *Enoch Arden.*
4. Macaulay : *Lord Clive.*

For 1898.
1. Shakespeare : *The Tempest.*
2. Scott : *Heart of Midlothian.*
3. Milton : *L'Allegro, Il Penseroso, Arcades, Comus, Lycidas.*
4. Addison : Selections from *Spectator* (Macmillan, ed. Deighton).

N.B.—In October 1896, alternative papers will be set in English Literature—one on the lines laid down in paragraph (i), and the other on the lines laid down in paragraph (ii), the prescribed books being the same for each paper. Candidates may select whichever paper they prefer.

(*d*) *History* will include a knowledge of one of the three following periods to be taken in successive years in the order herein mentioned, namely :—The Outlines of the History of both England and Scotland (*a*) from the Roman occupation to the Accession of James VI. (for October 1896); (*b*) from the Accession of James VI. to the Union of

the Parliaments in 1707 (for April and October 1897); (*c*) from the Union of the Parliaments in 1707 to the Reform Bill of 1832 (for April and October 1898).

(*e*) *Geography* will include a general knowledge of the Geography of the World, and a special knowledge of the Geography of the British Empire.

2. The *Latin* Examination on the Higher Standard will be—Translation, Prose Composition, Grammar, and Sentences.

3. The *Greek* Examination on the Higher Standard will be—Translation, Sentences, and Grammar.

The passages for Translation both from Greek and Latin will include Prose and Verse.

4. The *Latin* Examination on the Lower Standard will be—Translation and Parsing, Prose Composition, Grammar, and Sentences.

5. The *Greek* Examination on the Lower Standard will be—Translation, Sentences, and Grammar.

In the Latin and the Greek papers, both on the Higher and Lower Standards, Candidates are required to satisfy the Examiners both in composition and in translation.

6. In the Examination in Mathematics on the Higher, the Intermediate, and the Lower Standards, each question in Geometry will consist of two parts, of which one will be an easy deduction or illustrative exercise on the proposition set as bookwork.

The papers in Mathematics on the Higher Standard and on the Intermediate Standard will be devoted to the various subjects comprised in them as nearly as possible in the following proportions: two-fifths to Geometry, two-fifths to Algebra (including Arithmetic, if thought desirable), and one-fifth to Trigonometry.

Candidates for the Higher Standard may obtain full marks by doing correctly about two-thirds of the questions set in each subject; but the Examiners will be entitled to reject a Candidate who makes in any subject less than a certain minimum of the marks allotted to that subject.

The pass mark for Candidates on the Intermediate Standard is fixed with reference to the total number of marks assigned to questions which fall under the syllabus of the Intermediate Standard; but such Candidates will receive credit for any question they may answer.

The paper in Mathematics on the Lower Standard will be devoted to the various subjects comprised, in as nearly as possible the following proportions: four-ninths to Geometry, three-ninths to Algebra, and two-ninths to Arithmetic.

Candidates may obtain full marks by doing correctly about two-thirds of the questions set in each subject; but the Examiners will be entitled to reject a Candidate who makes in any subject less than a certain minimum of the marks allotted to that subject.

7. The paper on Dynamics will be directed to test the Candidate's knowledge of the fundamental principles of the subjects included in it.

As far as possible each question will consist of two parts, one of which will be a numerical or other simple illustrative example of the principle with which the other part of the question deals.

About one-seventh of the paper will be devoted to Kinematics, and the remainder of the paper will be assigned to Kinetics, Statics, and Hydrostatics, in as nearly as possible equal proportions.

Candidates may obtain full marks by doing correctly about two-thirds of the questions set in each section of the paper.

Dynamics shall include the following:—

(1) *Kinematics.*—Displacements, velocities, and accelerations of a moving point, with their compositions and resolutions. Translation of a rigid body. Relative velocity of two moving points.

(2) *Kinetics.*—The laws of motion, momentum, force, energy, work, —their measures in the British and C.G.S. systems of units. Change of units. Rectilinear motion of a particle under the action of constant forces. Free motion of a body under gravity, including projectiles. Atwood's machine. Impulsive forces. Direct impact of smooth spheres.

(3) *Statics.*—Composition and resolution of co-planar forces. Theory of co-planar couples. Conditions of equilibrium of forces in one plane. Centre of mass. Friction. Machines. Application of the principle of work to machines.

(4) *Hydrostatics.*—Definitions of *solid*, *fluid*, *liquid*, *gas*. Viscosity. Measure of pressure at a point of fluid. Law of equable transmission of pressure. Laws of variation of pressure in heavy liquids. Resultant pressure of a heavy liquid on a plane surface, including the centre of pressure of a plane surface. Principle of Archimedes. Experimental determination of the densities of solids, liquids, and gases. Atmospheric pressure. The barometer. Boyle's law. The siphon pumps for liquids, air pumps, and the diving-bell.

Questions may be set which involve the Trigonometry of right-angled triangles.

8. For the Examination in French and German—

Two papers will be set, both in French and German—an hour and a half being allowed for the first paper, and two hours for the second; the first paper to contain a passage for translation from English into French or German, with some short sentences of an idiomatic character; the second paper will contain a set of grammatical questions, two passages for translation into English (one in Verse, one in Prose), and a selection of Literary, Philological, or Historical questions, from which the Candidate will be allowed to choose *one only*.

The questions on Literature will be confined year by year to certain groups of authors, as in the following scheme, viz:—

French.—In October 1896.—(*XVIIth Century*)—Pascal, Descartes, Corneille, Racine, Molière, Boileau, La Fontaine, Mme. de Sévigné, Bossuet, Fénelon, La Rochefoucauld, La Bruyère. In April and October 1897.—(*XVIIIth Century*)—Regnard, Lesage, Massillon,

Saint Simon, Voltaire, Montesquieu, Vauvenargues, Marivaux, Jean Jacques Rousseau, Diderot, Buffon, Beaumarchais, Bernardin St Pierre, Mirabeau. In April and October 1898.—(*XIXth Century*)—Chateaubriand, Mme. de Staël, Lamartine, Victor Hugo, Alfred de Musset, Alexandre Dumas, George Sand, Balzac, Prosper Mérimée, Guizot, Thiers, Mignet, Michelet, About.

German.—In October 1896.—Klopstock, Wieland, Lessing, Herder, Bürger, Voss, Friedrich Leopold Stolberg, Hölty, Leisewitz. In April and October 1897.—Goethe, Schiller, Klinger, Lenz, Schubert, Arndt, Körner, Rückert. In April and October 1898.—Jean Paul, the Schlegels, Novalis, Tieck, Arnim, Brentano, Grillparzer, Heine, Uhland.

Candidates who, having taken in Latin or Greek the Examination on the Higher Standard have failed to pass on that Standard, but have obtained a percentage of marks equivalent to a pass on the Lower Standard, may be held by the Board to have passed the Examination on the Lower Standard.

Examinations Exempting from the Preliminary Examination in Arts and Science.

The Joint Board accept the following Examinations as exempting from the Preliminary Examination in Arts and Science, either *wholly* or *in part*:—

1. A Degree in Arts or in Science, not being an Honorary Degree, in any of the Universities of the United Kingdom, shall exempt from the Preliminary Examination in Arts or in Science, as the case may be.

2. For the Preliminary Examination in Arts and Science the Higher and Honours Grade Leaving Certificates of the Scotch Education Department in Latin, Greek, and Mathematics will be accepted as equivalent to the Higher Standard in each of these subjects, as prescribed by the Arts Regulations, and the Lower Grade Certificate to the Lower Standard; the Higher and Honours Grade Leaving Certificate in English and in Modern Languages will be accepted as equivalent to the standard prescribed for each of these subjects by the Arts Regulations.

3. A Certificate of having passed in the Honours or First Division in English in the London University Matriculation Examination will be accepted as equivalent to English in the Arts and Science Preliminary Examination; and the Joint Board also accepts for the Preliminary Arts and Science Examination (1) London University Matriculation Mathematics as equivalent to Lower Mathematics; (2) London University Matriculation Mechanics as equivalent to Dynamics; and (3) London University Intermediate Mathematics as equivalent to Intermediate and Higher Mathematics.

4. The Higher Certificate of the Oxford and Cambridge Schools Examinations Board will be accepted as equivalent to the Higher

Standard in each subject in the Preliminary Examination in Arts and Science, and their Lower Certificate as equivalent to the Lower Standard.

This Regulation will hold only till October 1897 inclusive.

5. *Oxford University Senior Local Examinations*, if passed with distinction, to be accepted as exempting *pro tanto* in Higher Latin, Higher Greek, French, German, and Intermediate Mathematics, and in English provided that the candidate has passed in division 1, and in division 3, or 4, or 5; if without distinction, to be accepted *pro tanto* for Lower Latin, Lower Greek, and Lower Mathematics.

6. *Oxford University Higher Examination for Women* to be accepted as exempting *pro tanto* for the Arts and Science in the case of Higher Latin, Higher Greek, English, and Lower Mathematics; and if with distinction, for French and German, and Higher Mathematics.

7. *Cambridge University Local Examinations*:—

(*a*) *Junior Locals.* The pass with distinction to be accepted for Lower Mathematics, provided the Candidate has passed in Books I., II., and III., of Euclid, and in Quadratic Equations.

(*b*) *Senior Locals.* The pass to be accepted as exempting *pro tanto* for Lower Latin, and Lower Greek, and for Higher Mathematics; and if with distinction, for Higher Latin, and Higher Greek, and English.

8. *Cambridge University Higher Local Examinations* to be accepted *pro tanto*.

9. *Oxford and Cambridge Schools Examination Board.* Lower Certificate to be accepted for Lower Mathematics, provided the candidate has passed in three books of Euclid, and as far as Quadratic Equations in Algebra.

Higher Certificate. The pass to be accepted for Lower Latin, Lower Greek, and Lower Mathematics, provided the latter includes Elementary and additional Mathematics; if with distinction, to be accepted for Higher Latin, Higher Greek, French, German, and Higher Mathematics.

10. *Victoria University.* The Preliminary Examination to be held as exempting from the Preliminary proper, but not from the Examination required for admission to a graduating class in any language. (See page 16, iv. §§ (3) (4) of Regulations.)

11. For the Preliminary Examination in Arts and Science, the Deans of the Faculties concerned are empowered to accept, *pro tanto*, such examinations qualifying for entrance to recognised Colonial and Foreign Universities (although not included in the list of Equivalent Examinations issued by the Joint Board) as they consider to be sufficient, but on condition that they afterwards report each case to the Senate, and to the Joint Board as soon as possible.

Dates of Entering for Preliminary Examination for the Academic Year, and for Payment of Fees.

The Preliminary Examinations are held in the Examination Hall in the University, in autumn and spring.

Each Candidate must pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

Candidates may obtain Schedules at the Matriculation Office, University (Old) Buildings, on and after 4th September 1896, and on and after 15th February 1897. The Schedules must be completed and lodged, along with the fees, not later than 18th September 1896 and 1st March 1897 for the autumn and spring Examinations respectively.

Candidates may pay the fees personally or transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts. When names are not entered and fees paid on or before the stated dates, a late-entry fee of 10s. must be paid. A Candidate is not held to be entered until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

Time-Tables for Preliminary and Bursary Examinations (for Arts and Science) for 1896-97.

		Medical Preliminary Examinations.	Arts, Science, Law (B.L.), and Music Preliminary Examinations and Bursary Examinations.
1896.			
Sept. 25	Fri.	... ...	Additional English for Bursaries, 9-12[1] Italian, 2-5[1, 4]
,, 26	Sat.	English, 9-11, 12-2 Do., Alternative Paper, 9-12 Greek, 3-6 Do., 3-5[2]	English, 9-11, 12-2[1, 3, 4] Lower Greek, 3-6[3, 4] Anglo-Saxon, for Patterson Bursary, 9-12, 2-5.

[1] Papers for the University Ordinary First Year Bursary Examination, for the Heriot University Bursaries both for men and for women, and for the Bursaries offered by the Edinburgh Association for the University Education of Women.

[2] For Students under the Old Regulations.

[3] Papers for the Preferential Bursary Examination.

[4] Papers for Music Preliminary: for Italian for Music Preliminary half-an-hour more will be allowed.

The Papers for the Heriot University Bursaries for Women Students of Medicine, and for the St George's Training College Bursaries for non-Graduates, are the Preliminary Examination Papers pure and simple: candidates for these Bursaries as such are not required to take any of the additional Bursary Papers.

		Medical Preliminary Examinations.	Arts, Science, Law (B.L.), and Music Preliminary Examinations and Bursary Examinations.
1896.			
Sept. 28	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12[3, 4] Lower Mathematics, 2-5[3, 4]
,, 29	Tu.	French, 3-6 Do., 3-5[2]	Higher Latin, 9-11, 12-2[1] Latin for Second and Third Year Bursaries, 9-12 French, 1st paper, 3-4.30[1, 4]
,, 30	Wed.	German, 3-6 Do., 3-5[2]	Higher Greek, 9-11, 12-2[1] Greek for Second and Third Year Bursaries, 2.30-5.30 German, 1st paper, 3-4.30[1, 4]
Oct. 1	Thur.	Higher Mathematics, 9-11, 12-2[2]	Intermediate and Higher Mathematics, and Mathematics for First, Second, and Third Year Bursaries, 9-11, 12-2[1] French, 2nd paper, 3-5[1, 4]
,, 2	Fri.	Moral Philosophy, 9-11[2] Mechanics, 1-4[2]	German, 2nd paper, 9-11[1, 4] Dynamics, 1-4[1] Logic and Psychology for Third Year Bursaries, 1-4
,, 3	Sat.	Natural Philosophy, 9-11[2] Logic, 2-4[2]	Elementary Physics, 9-11[4] Logic, 2-4[4] Additional Latin and Greek for Ordinary Bursaries, 9-12[1] Classics for Second and Third Year Bursaries, 9-12 Additional Mathematics for Ordinary Bursaries, and for Second and Third Year Bursaries, 2-5[1]

[1] Papers for the University Ordinary First Year Bursary Examination, for the Heriot University Bursaries both for men and for women, and for the Bursaries offered by the Edinburgh Association for the University Education of Women.

[2] For Students under the Old Regulations.

[3] Papers for the Preferential Bursary Examination.

[4] Papers for Music Preliminary.

The Papers for the Heriot University Bursaries for Women Students of Medicine, and for the St George's Training College Bursaries for non-Graduates, are the Preliminary Examination Papers pure and simple: candidates for these Bursaries as such are not required to take any of the additional Bursary Papers.

		Medical Preliminary Examinations.	Arts, Science, Law (B.L.), and Music Preliminary Examinations and Bursary Examinations.
1896.			
Oct. 5	Mon.	... ...	Higher Geometry for Kelland Prize, 9-12 Gaelic for Mackinnon Bursary 9-12
,, 6	Tu.	MEETING OF PRELIMINARY EXAMINERS.	
,, 9	Fri.	MEETING OF JOINT BOARD } At 10 A.M.	
,, 10	Sat.	MEETING OF JOINT BOARD } each day.	
,, 13	Tu.	CLASSES OPEN.	
1897.			
Mar. 26	Fri.	... ...	Italian, 2-5[4]
,, 27	Sat.	English, 9-12 Greek, 3-6 Do., 3-5[2]	English, 9-11, 12-2[4] Lower Greek, 3-6[4]
,, 29	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12[4] Lower Mathematics, 2-5[4]
,, 30	Tu.	French, 3-6 Do., 3-5[2]	Higher Latin, 9-11, 12-2 French, 1st paper, 3-4.30[4]
,, 31	Wed.	German, 3-6 Do., 3-5[2]	Higher Greek, 9-11, 12-2 German, 1st paper, 3-4.30[4]
Apr. 1	Thur.	Higher Mathematics, 9-11, 12-2[2]	Intermediate and Higher Mathematics, 9-11, 12-2 French, 2nd paper, 3-5[4]
,, 2	Fri.	Moral Philosophy, 9-11[2] Mechanics, 1-4[2]	German, 2nd paper, 9-11[4] Dynamics, 1-4
,, 3	Sat.	Natural Philosophy, 9-11[2] Logic, 2-4[2]	Elementary Physics, 9-11[4] Logic, 2-4[4]
,, 6	Tu.	MEETING OF PRELIMINARY EXAMINERS.	
,, 9	Fri.	MEETING OF JOINT BOARD } At 10 A.M.	
,, 10	Sat.	MEETING OF JOINT BOARD } each day.	

[2] For Students under the Old Regulations.
[4] Music Preliminary: for Italian for Music Preliminary half-an-hour more will be allowed.

FEES FOR DEGREE OF M.A.

Candidates for the Ordinary Degree pay for each of the subjects of Astronomy, Chemistry, Zoology, Botany, or Geology £1, 1s., and for each of the other subjects 15s.

Candidates for the Degree, with Honours, pay the same total fees as for the Ordinary Degree.

Those who fail in the Examinations pay 10s. 6d. for re-examination in each subject.

Dates of Entering for Examinations and for Payment of Fees.[1]

Candidates may obtain Schedules at the Matriculation Office. Schedules must be lodged, Certificates shown, and Fees paid as follows :—

1. For the Examinations in October 1896, *not later than 1st October.*

2. For the Examinations in Spring of 1897 Schedules must be lodged and Fees paid *not later than 5th March*, and the Matriculation Tickets and Class Certificates must be shown as follows :—For the Examinations in March at least *two clear days before* the date of the Examination in each subject ; for the Examinations in April, *not later than 27th March.*

3. For the Examinations in Chemistry, Zoology, Botany, and Geology in Summer 1897, Schedules must be lodged and Fees paid *not later than 9th July*, and Certificates shown on *Friday*, *16th July.*

When the Candidate has exhibited his Matriculation Tickets and the Certificates for Examination, the Clerk will stamp on the Receipt for the Fee the words, "Certificates examined," which entitle the Candidate to admission to the Examination Hall.

Candidates for Examination or for Graduation must be Matriculated Students of the Academic year.

Every Candidate for Graduation must produce certificates of having passed the necessary Examinations and pay the Fee of £1 for Registration as a Member of the General Council *at least one clear day before the date of Graduation.*[1]

The fees for Matriculation, Examinations for Degrees, and Registration of Graduates as Members of the General Council, are payable at the Matriculation Office, University. Candidates may pay the fees personally, or transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed "*Union Bank of Scotland (Hunter Square Branch), Edinburgh*," and not by cheques on private accounts.

Degrees are conferred by the Chancellor or the Vice-Chancellor of the University. They are not conferred *in absentia*, except on very special cause shown. Candidates must appear in Academic costume, with the appropriate hood.[2][3]

[1] When names are not entered nor fees paid on or before the stated dates, an additional or late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination. A Candidate is not held to be entered for the Examination until his Name is entered, the Fee paid, and all the necessary Certificates, &c., lodged.

[2] Black silk lined with *white.*

[3] Immediately after obtaining the Degree, Candidates should apply for their Diplomas at the Matriculation office. There is no additional charge for the Diploma. Any Graduate who cannot apply personally is required to give written authority to some person to receive and give a receipt for it.

TIME-TABLES FOR M.A. EXAMINATIONS FOR 1896-97.

		M.A. Examinations.	M.A. Honours Examinations.
1896.			
Oct. 6	Tu.	English, 9-11, 11.30-1.30 Rhetoric and English Literature, &c., for Degrees in Music, 9-11, 11.30-1.30 Latin, 2.30-4.30	
,, 7	Wed.	Latin, 9-11 Greek, 11.30-1.30, 2.30-4.30	
,, 8	Th.	Mathematics, 9-11, 11.30-1.30 Natural Philosophy, 2.30-4.30	
,, 9	Fri.	Natural Philosophy, 9-11 Logic, 11.30-1.30, 2.30-4.30	
,, 10	Sat.	Moral Philosophy, 9-11, 11.30-1.30	
,, 13	Tu.	CLASSES OPEN	
,, 26	Mon.	Constitutional Law & Hist., 2-4	
,, 27	Tu.	Roman Law, 9-1 Constitutional Law & History, 2-4	
,, 28	Wed.	Political Economy, 9-11, 11.30 1-30	
,, 29	Th.	Philosophy of Law, 9-11 Public International Law, 12-2	
1897.			
Mar. 15	Mon.	Constitutional Law & History, 2-4	
,, 16	Tu.	Roman Law, 9-1 Constitutional Law & History, 2-4	
,, 17	Wed.	Political Economy, 9-11, 11.30-1.30	
,, 18	Th.	Philosophy of Law, 9-11 Public International Law, 12-2 Sanskrit, 9-11, 11.30-1.30 Arabic and Syriac, 2.30-4.30	
,, 20	Sat.	Practical Chemistry, at hours to be announced (also on subsequent days if necessary). Arabic and Syriac, 9-11	

NOTE.—In the Examinations for the Degree of M.A. in Roman Law, Public Law, and Constitutional Law and History, candidates who intend to proceed later to the Degree of LL.B. must pass on the LL.B. standard.

		M.A. Examinations.	M.A. Honours Examinations.[1]
1897.			
Mar. 22	Mon.	Chemistry, 10-12 Oral Examinations in Science Subjects may begin Botany, 1-3	
,, 23	Tu.	Zoology, 10-12 Geology, 1-3	
,, 24	Wed.	Celtic, 9-11, 11.30-1.30 Hebrew, 2.30-4.30	
,, 25	Th.	Hebrew, 9-11 Astronomy, 11.30-1.30, 2.30-4.30	
,, 26	Fri.	Education, 9-11, 11.30-1.30 Archæology and Art, 3-5	English, 9-12, 2-5 Constitutional History, 9-12, 2-5
,, 27	Sat.	Archæology and Art, 9-11 History, 12-2, 3-5 Educn. Schoolmr's Diploma, 3-5	English, 9-12, 2-5 Constitutional History, 9-12
,, 29	Mon.	English, 9-11, 11.30-1.30 Rhetoric and English Literature, &c., for Degrees in Music, 9-11, 11.30-1.30 Logic, 3-5	English, 9-12, 2-5 Classics, 9-12, 2-5 Modern Languages, 9-12, 2-5 Logic, 9-12, 2-5 Pure Mathematics, 9-12, 2-5 History, 9-12, 2-5
,, 30	Tu.	Latin, 9-11, 11.30-1.30 Logic, 3-5	English (Hist.), 9-12, 2-5 Classics, 9-12, 2-5 Modern Langs., 9-12, 2-5 Logic, 9-12 Moral Philosophy, 2-5 Pure Mathematics, 9-12 Natural Philosophy, 2-5 History, 9-12, 2-5
,, 31	Wed.	Greek, 9-11, 11.30-1.30 Mathematics, 3-5	Classics, 9-12, 2-5 Modern Languages, 9-12, 2-5 Moral Philosophy, 9-12, 2-5 Natural Philosophy, 9-12 2-5 History of Art, 9-12, 2-5

[1] The order of the papers set at the particular hours fixed for the general Honours Subjects, within any department or group, may be varied at the discretion of the Examiners. It is impossible to avoid clashing between the hours of Examinations in the Pass, Honours, and Scholarships subjects, and Candidates should carefully consider early in their curriculum the arrangements for these Examinations in order, so far as possible, to avoid clashing.

		M.A. Examinations.	M.A. Honours Examinations.[1]
1897.			
Apr. 1	Th.	Mathematics, 9-11 Moral Philosophy, 11.30-1.30, 3-5	Classics, 9-12, 2-5 Modern Languages, 9-12 History of Art, 9-12
,, 2	Fri.	Natural Philosophy, 9-11, 11.30-1.30	Classics (Optional Subjects), 9-12, 2-5
,, 3	Sat.	French, 11.30-1.30, 3-5	
,, 5	Mon.	German, 9-11, 11.30-1.30, Essay, 3-4, French Essay, 4-5	
,, 7	Wed.	MEETING OF M.A. EXAMINERS FOR OLD SUBJECTS.	
,, 10	Sat.	GRADUATION CEREMONIAL at 10 A.M. COMMEMORATION SERVICE at 12 noon.	
July 17	Sat.	Practical Chemistry, at hours to be afterwards announced (also on following days if necessary).	
,, 19	Mon.	Chemistry, 10-12 Oral Examinations in Science Subjects may begin Botany, 1-3	
,, 20	Tu.	Zoology, 10-12 Geology, 1-3	

PASS EXAMINATIONS FOR MASTER OF ARTS.

(See Time-Tables, Pages 137-139.)

The subjects for the Examinations for the Ordinary Degree in October 1896 and April 1897 are as follows :—

I.—DEPARTMENT OF LANGUAGE AND LITERATURE.

1. *Latin.*

Horace, *Odes*, iii.-iv.—Virgil, *Æneid*, vi. and viii.—Juvenal, *Satires*, viii., x., xi., xii., xiii., xiv.—Cicero, *Philippics*, ii.—Tacitus, *Histories*, i. Translation from an Author or Authors not prescribed. Latin prose composition.

Roman History.—A general knowledge of Roman History to the death of Augustus, and a special knowledge of the period from 60 B.C. to the death of Augustus.

Roman Literature.—A general knowledge of Roman Literature to the end of the Augustan Age, and a more special knowledge of the Lives and Works of Horace, Virgil, Juvenal, Cicero, and Tacitus.

Every Candidate is required to satisfy the Examiners in translating English into Latin prose.

[1] See footnote, p. 138.

2. *Greek.*

Odyssey, xi.—Aeschylus, *Prometh. Vinct.*—Aristotle, *Ethics*, iv.—*Acts of the Apostles*. Translation from an Author or Authors not prescribed. Greek prose composition.

Greek History.—A general knowledge of Greek History to the death of Alexander, and a more special knowledge of the age of Demosthenes.

Greek Literature.—A general knowledge of the course of Greek Literature, and a special knowledge of the Heroic Age in Greece, as described in the Homeric Poems.

Laws of Hexameter and Iambic verse.

3. *English.*

The Principles of English Composition and Style: Class Lectures. History of the English Language: The First Five Chapters of Morris's "Historical Outlines of English Accidence." History of English Literature, more particularly from 1580 to 1798: Lectures, with Morley's Text Book, and the portions of Hallam's "Literature of Europe" that relate to English writers of the time mentioned.

Special Books for 1896-7—Shakespeare, *Twelfth Night* and *King Lear*—Chaucer, *The Knight's Tale*—Spenser, *The Faerie Queene*, Book ii.—Milton, *Comus*—Bacon, *Essays*—Dryden, *Essay of Dramatic Poesy*—Thomson, *Seasons*—Burke, *Thoughts on the Present Discontents*—Shelley, *Adonais*—Matthew Arnold, Selected Poems.

4 *French.*

Lamartine, *Discours politiques*—V. Hugo, *Les Châtiments, Napoléon le Petit, William Shakespeare, Actes et Paroles, Avant l'exil*—Faguet, *Politiques et Moralistes, Chanson de Roland* (ed. Clédat)—Taine, *Extraits*—Clédat, *Morceaux choisis du Moyen-Age.*

Passages from French Authors not prescribed. French prose composition. A general knowledge of the development of the French language. A general knowledge of French history, and of the history of French Literature, with a more minute knowledge of the period 1680-1780.

Every Candidate is required to satisfy the Examiners in translating English into French prose.

5. *German.*

Althochdeutsche Litteratur, ed. Schauffler—*Der Nibelunge Nôt*, ed. Golther—Brant, Luther, Sachs, Fischart, ed. Pariser—Schiller, *Maria Stuart*, ed. Breul—Goethe, *Aus meinem Leben*, Buch vii.-x. (Werke, *Cotta*, vol. xx.)—Heine, *Die Nordsee* (Buch der Lieder; Werke, *Cotta*, vol. i.)—Immermann, *Der Oberhof*, ed. Wagner—Gutzkow, *Zopf und Schwert*, ed. Wolstenholme.

Passages from German Authors not prescribed. German prose composition. A general knowledge of the development of the language. A general knowledge of German History, and of the History of

German Literature, with a more minute knowledge of the period 1740-1820.

Every Candidate is required to satisfy the Examiners in translating English into German prose.

6. *Sanskrit and Comparative Philology.*

Hitopadeśa, introduction and book ii.—Nala, cantos 1-11—Sanskrit Grammar—Sanskrit prose composition.

A general knowledge of the course of Sanskrit Literature.

7. *Hebrew and Oriental Languages.*

Hebrew.—1. Questions in Grammar.—2. Translation into Hebrew Prose.—3. Deuteronomy i.-xviii. Kings, books 1 and 2. Micah. Psalms i.-xx.—4. *Jewish History* from B.C. 1010-598.

Syriac.—1. Questions in Grammar—2. Translation into Syriac Prose—3. Sections i., iii., ix., xii., xiv. of Rœdiger's *Chrestomathia Syriaca* (Ed. 1892); *Book of Acts* in the Peshitta Version.—4. History of the Syriac Versions of the Scriptures in detail; Wright's *Short History of Syriac Literature*, pp. 1-107.

Arabic.—1. Questions in Grammar. 2. Translation into Arabic Prose. 3. Bruennow's *Chrestomathy of Arabic Prose Pieces*, pp. 1-22, 44-55; *The Kor'an*, Sûra iii. 4. *Arabian History.*—Sir W. Muir's *The Caliphate:* its Rise, Decline, and Fall.—Chapters 1-45 and 64-67.

8. *Celtic.*

Modern Gaelic (Scottish and Irish)—Ossian, Fingal, Books iv. to vi. inclusive, and Alexander Macdonald's Poems, *or* Keating's Three Shafts of Death.

Old Gaelic.—Fled Bricrend (Windisch's Irische Texte).

Passages in Old and Modern Gaelic (both Scottish and Irish) from Authors not prescribed.

Translation from English into Gaelic Prose (Scottish *or* Irish).

Gaelic Literature.—From the commencement till 1000 A.D.

II.—Department of Mental Philosophy.

1. *Logic and Psychology.*

The elementary doctrines of Logic and Psychology; and the History of Philosophy so far as treated in the Class Lectures.—Locke's *Essay*, Book ii., Chapters 1-12, and Chapter 23, along with "*Locke*," in "Philosophical Classics" (Blackwood), Professor Fraser's "*Selections from Berkeley*"—"Editor's Introduction"; "Principles of Human Knowledge" (sect. 1-84, and 135-156); "Divine Visual Language: A Dialogue." Hume's *Enquiry concerning Human Understanding.*—Sections 1-7 inclusive.

2. *Moral Philosophy.*

Professor's "Handbook of Moral Philosophy"; Butler "On Human Nature"; Mill's "Utilitarianism"; Sidgwick's "Outlines of the History of Ethics," Chapters ii. and iv.

3. *Commercial and Political Economy.*

The subjects of examination are: The Lectures of the Professor; Mill's *Principles of Political Economy*, Books i.-iii.; Marshall's *Economics of Industry* (*new edition*); Adam Smith's *Wealth of Nations*, Book iv.; Professor Nicholson's *Money and Monetary Problems* (3rd edition), *The Treatise on Money.*

4. *Theory, Art, and History of Education.*

Theory and Art.—Subjects of examination: Lectures of the Professor; *Locke's Thoughts* (parts which deal with moral training); *Locke on the Conduct of the Understanding: Language and Linguistic Method in the School, by Professor Laurie* (2nd edition); *Comenius' Great Didactic.*

The Theory or Science of Education comprises the Psychology and Ethics in Laurie's "*Institutes of Education.*"

History.—A general knowledge of Bacon, Ratke, Rousseau, and Pestalozzi, as in Compayre's Manual, or Quick's Educational Biographies.

5. *Philosophy of Law.*

(*See under* "*Public Law.*")

III.—Department of Science.

1. *Mathematics.*

Arithmetic.—Euclid, Books i., ii., iii., iv., vi., and xi., or their equivalent, with their application to Mensuration.—Algebra, Trigonometry, Conic Sections, Geometrical and Analytical.

Candidates must show sufficient knowledge in each of these subjects.

2. *Natural Philosophy.*

Elementary Dynamics, Astronomy and Experimental Physics.

Candidates must show sufficient knowledge both of Dynamics and of Experimental Physics.

3. *Practical Astronomy.*

The Class Lectures.—Use of the Sextant, Transit-Circle, Wire and Ring Micrometers.—Young's General Astronomy; Main's Practical and Spherical Astronomy, or corresponding portions of Brünnow's Astronomy. Sir John Herschel's Outlines of Astronomy, omitting Part IV.

4. *Chemistry.*

Chemical changes as distinguished from physical changes. Elements; compounds; mixtures. Laws of chemical combination by weight and by volume. The atomic theory. Atoms; molecules. Avogadro's Hypothesis. Molecular weights of gaseous and volatile substances. Atomic weights. Law of Dulong and Petit. Chemical Notation—Symbols; formulæ; equations. Simple chemical calculations.

The non-metallic elements and their chief compounds; especially the compounds of oxygen, of hydrogen, and of chlorine, with the other

non-metals. The more important inorganic acids. The atmosphere. Combustion. Oxidation and reduction.

The following metallic elements and their chief compounds; especially those with oxygen, with chlorine, and with sulphur: Gold, platinum, silver, mercury, lead, antimony, tin, copper, bismuth, zinc, iron, aluminium, chromium, manganese, barium, strontium, calcium, magnesium, potassium, sodium.

The following salts: the ammonium salts; the more important sulphates, sulphites, thiosulphates, nitrates, nitrites, carbonates, bromides, iodides, iodates, phosphates, borates, silicates.

The relations of bases, acids, and salts. Electrolysis. Quantivalence. The periodic law.

The metallurgy of silver, mercury, copper, lead, tin, zinc, iron. Alloys, such as brass, bronze, solder, type-metal. Amalgams.

The manufacture of aluminium, magnesium, potassium, sodium, glass, porcelain, mortar, gunpowder, sulphuric acid, sodium carbonate and bicarbonate, caustic soda, bleaching powder and chlorates, wrought-iron, steel, white lead.

Classification of Carbon Compounds. Marsh Gas and its Homologues. Chloroform. Methyl and Ethyl Alcohols and Ethers. Substituted ammonias and ammonium salts. Formic and Acetic Acids, Aldehyde, Acetone, Chloral, Olefiant Gas, Oxalic Acid, Lactic Acid. Tartaric Acid, Citric Acid. Fats and Oils, Saponification, Glycerine. Cellulose, Sugars, Starch. Distillation of Wood and of Coal. Benzene, Benzoic Acid, Phenol, Salicylic Acid, Oil of Bitter Almonds. Hydrocyanic Acid, Cyanides, Cyanates, Thiocyanates, Urea, Uric Acid.

Simple Qualitative Analysis. The examination in this is conducted practically. Candidates are required to examine unknown *single salts* for both metallic and salt radicals, as contained in the following lists:—

Silver, Mercurous, Mercuric, Cupric, Lead, Stannous, Stannic, Bismuth, Antimony (*Tartar Emetic* may be given), Arsenious, Zinc, Manganous, Ferrous, Ferric, Chromic, Aluminium, Calcium, Barium, Strontium, Magnesium, Ammonium, Sodium, Potassium.

Carbonate, Sulphite, Thiosulphate, Sulphide, Hypochlorite (Bleaching solution), Nitrite, Chloride, Bromide, Iodide, Cyanide, Sulphate, Chromate, Orthophosphate, Arseniate, Arsenite, Borate, Oxalate, Nitrate, Chlorate, Acetate.

At the examination, Candidates are supplied with the following reagents, &c.:—Acetic Acid, dilute Hydrochloric Acid, dilute Nitric Acid, Sulphuric Acid, dilute Sulphuric Acid, Alcohol, Iodine, Ammonia, Ammonium Carbonate, Ammonium Chloride, Ammonium Oxalate, Ammonium Sulphide, Barium Nitrate, Bleaching Powder, Calcium Chloride, Calcium Hydrate, Calcium Sulphate, Cobaltous Nitrate, Cupric Sulphate, Ferric Chloride, Ferrous Sulphate, Lead Acetate, Magnesium Sulphate, Mercuric Chloride, Potassium Carbonate, Potassium Chromate, Potassium Ferricyanide, Potassium

Ferrocyanide, Potassium Hydrate, Potassium Iodide, Silver Nitrate, Sodium Bitartrate, Sodium Phosphate, Sodium Sulphite, Stannous Chloride, Sulphuretted Hydrogen. *Solids* — Manganese Dioxide, Sodium Carbonate, Borax, Sulphur, Zinc, Copper.

Test-papers :—Blue Litmus, Red Litmus, Plain, Starch, Turmeric.

Bunsen Burner, Test Tubes.

5. *Zoology.*

(*a*) The General Principles of Biology.

(*b*) The distinctive characters of the Invertebrate groups and the structure, habits, &c., of Amœba, Paramœcium, Hydra, Arenicola, Hirudo, Anodon, Helix, Nephrops, and Periplaneta.

(*c*) The distinctive characters of the Chordata groups and the structure, habits, &c., of Myxine, Raia, Clupea, Rana, Columba, Ornithorhynchus, Macropus, Lepus, Ovis, and Canis.

(*d*) The skeletons of Crocodilus, Equus, Felis catus, Balæna, Vespertilio, and Simia (Orang).

(*e*) A general knowledge of the orders of Sauropsida and Mammalia.

(*f*) The structure and life-history of Gregarina, Distoma, Tænia, Ascaris, Trichina, and Filaria.

(*g*) The more important facts of the development of Scyllium, Rana, Gallus, and Lepus.

(*h*) The principles of the Geographical Distribution of Animals, and the Distribution of the Mammalia.

In addition to the above subjects, Candidates will require to possess a general knowledge of Wallace's "Darwinism."

6. *Botany.*

The characteristic features of the following groups and classes of the vegetable kingdom :—

Thallophyta [Schizophyta, Algæ, Fungi]; Muscineæ [Hepaticæ, Musci]; Pteridophyta [Filicineæ, Equisetineæ, Lycopodineæ]; Phanerogamæ [Gymnospermæ, Angiospermæ (Monocotyledones, Dicotyledones)].

The fundamental facts and principles of Morphology (including Anatomy, Histology, and Development) and Physiology.

The life-history of the following plants: — Bacterium, Nostoc, Spirogyra, Saccharomyces, Mucor, Vaucheria, Agaricus, Collema, Puccinia, Claviceps, Eurotium, Marchantia, Fucus, Polysiphonia, Funaria, Aspidium, Equisetum, Selaginella, Pinus, Cycas, Scilla, Capsella, Helianthus, Ulmus, Quercus.

The characters of plants belonging to the chief British natural orders of Phanerogamæ.

7. *Geology including Mineralogy.*

1. *Dynamical Geology.*—The nature and operation of geological agents :—The Atmosphere, Rain, Terrestrial Waters, Ice, the Sea, Plants and Animals, Volcanoes, Movements of the Earth's Crust.

2. *Mineralogy.*—Characters of the chief rock-forming minerals.

3. *Petrology.*—Megascopic and Microscopic Characters, Composition, Origin and Distribution of the more important Rocks.

4. *Structural Geology.*—Structure of Rock-masses, Bedding, Joints, Cleavage, Foliation, Metamorphism, Faults, Unconformity.

5. *Stratigraphical Geology.*—History of the Geological Systems of the British Islands.

6. *Palæontological Geology.*—Characters, and distribution in time, of the more important Genera and Orders found fossil in Britain.

7. *Physiographical Geology.*—Origin of the present outlines of the Earth's surface.

IV.—Department of History and Law.

1. *History.*

Subject of Examination: General British History, viz.:—(1) History of the British Isles from B.C. 55 to A.D. 1885, in outline; (2) History of the British Isles from 1603 to 1689, in fuller detail.

The Examiners will attach greater importance to a grasp of principles than to mere knowledge of details.

Books recommended:—(*a*) For the *General History*, Gardiner's "Student's History of England," Green's "Short History of the English People," Bright's "History of England," or Ransome's "Advanced History of England;" Macarthur's "History of Scotland." (*b*) For the *Special Period*, Gardiner's "Puritan Revolution" and Hale's "Fall of the Stuarts" (Epochs of English History), Harrison's "Life of Oliver Cromwell" (Twelve English Statesmen), Burton's "History of Scotland," vols. 6 and 7, Macaulay's History of England, caps. 1-15.

2. *Archæology and Art* (*History of*).

The subjects for examination will be the Class lectures, the Professor's Manual "The Fine Arts," Conway's "Dawn of Art in the Ancient World," Paris's "Manual of Ancient Sculpture," Parker's "Introduction to Gothic Architecture," Poynter's "Classic and Italian Painting." Candidates will be expected to show some knowledge of the original authorities for the different periods of Art History.

3. *Constitutional Law and History.*

Subjects of examination: Constitutional Law and History of England, as treated of in the Lectures and in the works of Stubbs, Hallam, and May; and that of the U.S. of America, of France, of Germany, and of Switzerland, as treated of in the Lectures and in the works of Bancroft, Bryce, Adams and Cunningham, Dareste, Demombynes, &c.

4. *Roman Law.*

Subjects of examination: (1) The history of the law from the foundation of Rome to Justinian, and (2) a general knowledge of the principles and doctrines of the Law. Maine's "Ancient Law," and Muirhead's "Historical Introduction," are recommended for the historical part, and Justinian's Institutes, Bk. i. to Bk. iv., Tit. vi., must be professed for the doctrinal part.

5. *Public Law.*

I. The Philosophy of Law.

Green, Principles of Political Obligation; Ritchie, Natural Rights; Lorimer, Institutes of Law; Ahrens, Cour de Droit Naturel; Bluntschli, The Theory of the State. The Student's Austin; Holland, Jurisprudence; Sir H. Maine's Works.

II. Public International Law.

Wheaton's "History of the Law of Nations," Nys's "Les Origines du Droit International," Hall's "International Law."

EXAMINATIONS FOR GRADUATION IN ARTS WITH HONOURS.

(*Examinations for Honours are held in April only.*)

(See Time-Table of Examinations, pp. 138 and 139.)

A.—Classics.

N.B.—It should be understood that a general acquaintance with the Greek and Latin writers of the classical age will be expected from all candidates; and unseen passages from other than the prescribed authors will form an important part of the examination.

The subjects of Examination for the Degree of Master of Arts with Honours in April 1897 and 1898 are as follows:—

1. *Latin for April* 1897.

Plautus, *Stichus*—Horace—Lucretius, i., ii.—Juvenal, with omission of ii., vi., ix.—Tacitus, *Histories*, i., ii.—Pliny, *Letters*, ii., iii.

Roman History.—A general knowledge of Roman History to the end of the first century A.D., and a more special knowledge of the period from 146 B.C. to the death of Augustus.

Roman Literature.—A general knowledge of the course of Roman Literature, and a more minute knowledge of the Lives and Writings of the Authors prescribed.

Latin for April 1898.

Plautus, *Trinummus Rudens*—Virgil—Horace, *Epistles*, bk. ii. and *Arts Poetica*—Lucretius, v.—Lucan, *Pharsalia*, vii.—Cicero, *Letters* (Watson's Selection, parts i., ii.)—Tacitus, *Annals*, iii.-vi., with the Dialogue *De Oratoribus*.

Latin prose composition and translation from Authors not prescribed.

Roman History.—A general knowledge of Roman History to the end of the first century A.D., and a more special knowledge of the period from 100 B.C. to the death of Tiberius.

Roman Literature.—A general knowledge of the course of Roman Literature, and a more minute knowledge of the Lives and Writings of the Authors prescribed.

2. *Greek for April* 1897.

Homer, *Odyssey*, i.-xii.—Pindar, *Olympian and Pythian Odes* (Gildersleeve)—Aristotle, *Nic. Ethics*, i.-iv. (inclusive) and x.—Plutarch's *Lives of Pericles*, *Timoleon*, *Nicias* (Holden).

Greek Prose Composition—Translation from Authors not prescribed.

Greek History.—A general knowledge of Greek History to the death of Alexander, and a more minute knowledge of the period embraced by the Athenian supremacy.

Greek Literature.—A general knowledge of Greek Literature, and a more minute knowledge of the Authors prescribed.

Greek Grammar.—As a special subject, Monro's *Homeric Grammar.*

Greek for April 1898.

Homer, *Odyssey*, xiii.-xxiv.—Euripides, *Bacchae*, *Hippolytus*, *Alcestis*, *Orestes*—Demosthenes, *Leptines*, *Aristocrates*, *Timocrates*—Aristotle, *Nic. Ethics*, i.-iv. (inclusive) and x.

Greek prose composition—Translation from Authors not prescribed.

Greek History.—A general knowledge of Greek History to the death of Alexander, and a more minute knowledge of the development of the Athenian constitution.

Greek Literature.—A general knowledge of Greek Literature, and a more minute knowledge of the Authors prescribed.

Greek Grammar.—As a special subject, Monro's *Homeric Grammar.*

Optional Subjects.

1. *Comparative Philology for April* 1897 *and April* 1898.

Candidates who take Comparative Philology as their optional subject for Graduation with Honours in Classics, will be examined in the following branches of Linguistic Science:—(*a*) Science of Language, including the history and general results of Linguistic research. (*b*) Principles of Indo-European Comparative Philology, with special reference to the Greek and Latin Languages. (*c*) Etymology of Greek and Latin.

Books recommended for private study:—(*a*) M. Müller, Lectures on the Science of Language. W. D. Whitney, Language and the Study of Language. B. Delbrück, Introduction to the Study of Language. (*b*) V. Henry, Short Comparative Grammar of Greek and Latin (transl. by R. T. Elliott).

Also recommended for reference:—King & Cookson, Principles of Sound and Inflexion. Brugmann & Stolz, Greek and Latin Grammar (Iwan Müller's Handbuch der Klassischen Alterthumswissenschaft, vol. ii.). Blass, Pronunciation of Ancient Greek (Cambridge University Press). (*c*) Curtius, Principles of Greek Etymology, Book ii.

Classical Archæology for April 1897 *and April* 1898.

1. The general history of the Arts of Form in Greece. To be studied in Overbeck's "Schriftquellen," and Murray's "Handbook of Greek Archæology."

2. The history of Greek Sculpture. To be studied in Murray's "History of Greek Sculpture," 2nd Ed., or E. Gardner's "Handbook of Greek Sculpture."

3. The types of Greek Coins. To be studied in P. Gardner's "The Types of Greek Coins."

Ancient Philosophy for April 1897.

The Pre-Socratic Philosophy, with original authorities as quoted in Ritter and Preller. *Historia Philosophiae Graecae;* The Sophists and Socrates; Plato, *Theaetetus*, together with the outlines of the Platonic Philosophy.

Books recommended :—Zeller, *Pre-Socratic Philosophy*, vol. i. and ii. (Translation by Alleyne). Burnet, *Early Greek Philosophy.*

Or, as an alternative :

Plato, *Philebus*, together with the outlines of the Platonic Philosophy; the Philosophy of Aristotle in its psychological and ethical aspects, with special reference to Aristotle, *De Anima*, and *Nicom. Ethics*, bks. i.-iv. and x.

Ancient Philosophy for April 1898.

The Pre-Socratic Philosophy, with original authorities as quoted in Ritter and Preller, *Historia Philosophiae Graecae;* The Sophists and Socrates; Plato, *Theaetetus*, together with the outlines of the Platonic Philosophy.

Books recommended :—Zeller, *Pre-Socratic Philosophy*, vol. i. and ii. (Translation by Alleyne). Burnet, *Early Greek Philosophy.*

Or, as an alternative :

Plato, *Philebus*, together with the outlines of the Platonic Philosophy; the Psychology and Logic of Aristotle, with special reference to Aristotle, *De Anima*, and Trendelenburg's *Elementa Logices Aristoteleae.*

B.—Mental Philosophy.

1. *Logic and Metaphysics for April* 1897 *and April* 1898.

The more advanced doctrines of Logic and Psychology.

A competent knowledge of the History of Philosophy.

Plato, *Theaetetus*—Aristotle, *De Anima*—Spinoza, *Ethics*, Parts i., ii.—Locke, *Essay concerning Human Understanding*—Berkeley, in Professor Fraser's "*Selections.*"—Hume, *Treatise on Human Nature*, Book i. (Of the Understanding)—Kant, *Critique of Pure Reason*—Hegel's *Logic* in Professor Wallace's translation, chapters i.-vi.—Lotze's *Metaphysics*, Book i. (Clarendon Press).

2. *Moral Philosophy.*

The Class Lectures for Advanced Students.

Plato's *Protagoras*—Plato's *Republic*—Aristotle, *Ethics* (omitting v., vi., vii.)—Spinoza, *Ethics*, Parts iii., iv., v.—Kant, *Groundwork of the Metaphysic of Ethics*—Hegel's *Philosophy of the State* (Grigg's German Philosophical Classics)—Sidgwick's *Methods of Ethics*, Books iii. and iv.—Green's *Prolegomena of Ethics*, Books ii. and iii.—Herbert Spencer's *Data of Ethics.*

C.—Mathematics and Natural Philosophy.

Pure Geometry, Algebra, Theory of Equations, including Determinants, Trigonometry (Plane and Spherical), Analytical Geometry,

Differential and Integral Calculus, Calculus of Finite Differences. (The Candidate may, if he please, profess the Elements of Quaternion Analysis.)

Experimental Physics; Analytical Dynamics and Thermodynamics; *imperative.*

In addition, two or more branches of Elementary Mathematical Physics (such as Geometrical or Physical Optics, Statical or Voltaic Electricity, Capillarity, &c.). These may be selected by the Candidate.

D.—English (Language, Literature, and British History).

1. Candidates for Honours in English must attend at least four complete courses of Lectures within their Honours group, viz.: (*a*) Not less than two Courses in English Literature, of which one at least must be an Honours Course; and—(*b*) not less than two Courses—one of which at least must be an Honours Course—in the Subsidiary subjects, English Language and British History; or in either of them.

2. Every such candidate must be examined in all the three subjects mentioned in the Regulations, Section XI. (1) *f.*

Subjects for April 1897.

1. *Literature.*

1. Rhetoric and the Principles of Literature. Knowledge of the following required:—Aristotle's *Rhetoric* and *Poetics;* Quintilian's *Institutes*, especially Books ix. and x.; Longinus *On the Sublime;* Bacon's *Advancement of Learning*, Book II.; Bain's *Composition and Rhetoric;* De Quincey's *Essay on Rhetoric;* Masson's *Essay on Milton's English and Versification* (in Edition of Milton); Guest's *English Rhythms;* Wordsworth's *Prose Prefaces.*

2. History of English Literature. (1.) *General.—Books recommended:*—Ten Brink's *Early English Literature* (transl. by Kennedy); Stopford Brooke's *Early English Literature;* Ward's *English Dramatic Literature;* Saintsbury's *Elizabethan Literature* and *Nineteenth Century Literature;* Gosse's *Eighteenth Century Literature;* Ward's *English Poets;* Craik's *English Prose;* Irving's *History of Scottish Poetry.* (2.) *Special.*—The Literature of the Seventeenth Century. Candidates are required to show thorough knowledge of the following:—Milton's *Poems*, *Areopagitica*, *Of Reformation*, and *Of Education;* George Herbert's *Poems;* Herrick's *Hesperides;* Waller's *Poems;* Denham's *Cooper's Hill;* Cowley's *Pindarique Odes* and *Essays;* Browne's *Urn-Burial;* Butler's *Hudibras;* Marvell's *Satires; The Rehearsal;* Dryden's *Indian Emperor*, *Essay of Dramatic Poesy* and *the Defence of the Essay*, *MacFlecknoe*, *Dedication of the Æneïs.*

3. The subjects of any other Honours Course in English Literature the Candidate may have attended.

Candidates will be required to write a Critical Essay on some subject arising out of Nos. 1, 2, or 3.

2. *Language.*

1. The History of Old and Middle English.
   Text-books for reference.—Sievers's *Old English Grammar* (ed. Cook) or Sweet's Introduction to the *Old English Reader*; Skeat's *Principles of English Etymology*; Kellner's *Historical Outlines of English Syntax.*
2. *Special Readings.*—*Beowulf* (ll. 1-1250); Selections in Sweet's *Anglo-Saxon Reader* and Morris's *Specimens of Early English*, Part I.; Chaucer's *House of Fame*, *Prologue*, and *Monk's*, *Clerk's*, *and Squire's Tales* (Canterbury Tales); Piers Plowman (*Prologue* and first three Passus); Dunbar's *Poems.*
3. Unseen passages for translation into Modern English.

3. *British History.*

Those branches of British History which form the subjects of the Courses given by the Professor of History. Candidates to intimate the subjects they select at the time of entering their names for Examination.

Subjects for April 1898.

1. *Literature.*

1. Rhetoric and the Principles of Literature. Books as for 1897.
2. History of English Literature. (1.) *General.*—*Books recommended* —as for 1897. (2.) *Special.*—The Literature of the Eighteenth Century. Candidates are required to show thorough knowledge of the following:—Pope, *Essay on Criticism*, *Essay on Man*, *Satires*, and *Epistles*; Swift, *Tale of a Tub*, and *Gulliver's Travels*; Thomson, *The Seasons*, and *Castle of Indolence*; Johnson, *Lives of Milton*, *Cowley*, *Dryden*, and *Pope*; Gray's *Poems*; the poems of Allan Ramsay, Fergusson, and Burns; Cowper, *The Task*; Crabbe, *The Village*; Burke, *Thoughts on the Present Discontents.*
3. The subjects of any other Honours Course in English Literature the Candidate may have attended.

Candidates will be required to write a Critical Essay on some subject arising out of Nos. 1, 2, or 3.

2. *Language.*

1. The History of Old and Middle English.—For Books recommended for reference see under Course on the History of Old and Middle English (p. 69).
2. Special Readings—*Beowulf* (ll. 1251-1887); The Verse Passages in the *Saxon Chronicle*; Prose selections in Sweet's *Anglo-Saxon Reader*; Morris's *Specimens of Early English*, Part I.; Chaucer's *House of Fame*; Piers Plowman (Passus, iv. v. vi.); *The Kingis Quair*; Gavin Douglas's *Prologues to the Æneid.*
3. Unseen passages for translation into Modern English.

3. *British History.*

Those branches of British History which form the subjects of the Courses given by the Professors of History. Candidates to intimate the subjects they select at the time of entering their names for Examination.

E.—Modern Languages and Literature.

1. *French for April* 1897.

Clédat, *Morceaux choisis du Moyen-Age;* Faguet, *Etudes sur le* 19*me siècle*—Faguet, *Politique et Moralistes au* 19*me siècle*—Lanson, *Histoire de la Littérature française*—Taine, *Extraits.*—Michelet, *Précis de la Révolution française*—V. Hugo, *Les Contemplations.*

French History—A general knowledge of French History, and a more minute knowledge of the period from 1789 to 1870.

French Literature—A general knowledge of the history of French Literature, and a special knowledge of the period from 1802 to 1889.

Romance Philology—The general principles of Romance Philology (Brachet, *Grammaire historique;* Bartsch, *La Littérature française jusqu'au* 14*me siècle;* Brunot, *Grammaire historique*, 3rd ed.).

French for April 1898.

Darmesteter, *Morceaux choisis du* 16*me siècle*—Vie de Saint-Alexis (ed. Gaston, Paris)—V. Hugo, *Légende des Siècles*, *Contemplations*, and *Torquemada*—*Extraits de Rousseau*—Lamartine, *Discours politiques.*

French History—A general knowledge of French History, and a more minute knowledge of the period from 1789 to 1870.

French Literature.—A general knowledge of the history of French Literature, and a special knowledge of the period from 1802 to 1889.

Romance Philology.—The general principles of Romance Philology (Brachet, *Grammaire historique;* Bartsch, *La Littérature française jusqu'au* 14*me siècle;* Brunot, *Grammaire historique*, 3rd ed.).

German for April 1897.

Althochdeutsche Litteratur (ed. Schauffler; Göschen)—Liederdichter (ed. Bartsch)—Hans Sachs (ed. Kinzel)—Klopstock, *Oden;* Lessing, *Nathan der Weise* (Clar. Press)—Lessing, *Hamburgische Dramaturgie*—Goethe, *Tasso;* Schiller, *Philosophische Gedichte*—Storm, *Der Schimmelreiter*—Stifter, *Der Hochwald.*

German History.—A general knowledge of German History, and a more minute knowledge of the period from 1700 to 1820.

German Literature.—A general knowledge of German Literature, and a special knowledge of the period from 1740 to 1832 (Scherer, *History of German Literature;* Kluge, *National Litteratur*).

Teutonic Philology.—The general principles of Teutonic Philology, and a more intimate knowledge of Modern German Etymology (Duden, *Etymologie der Neuhochdeutschen Sprache*).

German for April 1898.

Althochdeutsche Litteratur (ed. Schauffler)—Walther von der Vogelweide (ed. Bartsch); *Das deutsche Kirchenlied des* 16. *und* 17. *Jahrhunderts* (ed. E. Wolff, Kürschner); *Musterstücke aus Werken*, Winckelmann's (ed. Kühne, Weidmann); Schiller, *Über naive und sentimentalische Dichtung* (ed. J. Egger und K. Rieger, Gräser); Goethe, *Faust, I. Teil* (ed. J. Lee); Storm, *Aquis submersus;* G.

Freytag, *Bilder aus der deutschen Vergangenheit* (Werke, vol. xix., Hirzel).

German History.—A general knowledge of German History, and a more minute knowledge of the period from 1700 to 1820.

German Literature.—A general knowledge of German Literature, and a special knowledge of the period from 1740 to 1832 (Scherer, *History of German Literature*; Kluge, *National Litteratur*).

Teutonic Philology.—The general principles of Teutonic Philology, and a more intimate knowledge of Modern German Etymology (Duden, *Etymologie der Neuhochdeutschen Sprache*).

F.—History.

Candidates for Honours in History must attend two Classes (one, at least, of which must be an Honours Class) in each of their Honours Subjects. (See Synopses of Courses.)

The Honours subjects at present recognised are (1) Modern History, (2) Constitutional History, and (3) History of Art.

I. Under the head of *Modern History* four papers will be set.

Subjects for 1897.

(1) General survey of British History, from B.C. 55 to A.D. 1885, with special attention to the period 1603-1689. Some knowledge of Gardiner's "Documents of the Puritan Revolution," and Carlyle's "Letters and Speeches of Cromwell" will be required.

(2) The Origin and Development of the British Empire 1558-1858, with special attention to the Eighteenth Century. For Authorities, see p. 91.

Subjects for 1898.

(1) General survey of British History from B.C. 55 to A.D. 1885, with special attention to the period 1328-1485. Special books—"Piers Plowman," "The Paston Letters."

(2) Nationality and Reform in Great Britain and Europe of 1815-1878, with special attention to the Revolution of 1848. For Authorities, see p. 91.

II. In *Constitutional History* four papers:—

Subjects for 1897.

(1) and (2) Constitutional History of England from 1688 to 1832, with special reference to the new Kingship and the Cabinet System.

(2) Constitutional History of America, France, Switzerland, and Prussia in outline, from 1753 to 1875.

(3) and (4) Wycliffe and his Influence on Church and State.

The Candidate must show some familiarity with the original sources (in Latin, French, Old English, &c.).

Subjects for 1898.

(1) and (2) Constitutional History of England and Scotland (*a*) during the Stuart Period; (*b*) from 1688 to 1707.

(3) Historical Origins of the chief European Constitutions.

(4) History of Civil and Religious Liberty, from 1384 to 1563.

The Candidate must show some familiarity with the original sources (in Latin, French, Old English, &c.).

III. In *History of Art* three papers:—

(1) The Class Lectures; the Professor's Manual "The Fine Arts"; Conway's "Dawn of Art in the Ancient World"; Woltmann's "History of Painting," Vols. I. and II.; select passages bearing on Ancient Art from Overbeck's "Schriftquellen"; portions of Theophilus' "Schedula Diversarum Artium"; selected lives from Vasari's "Lives of the Italian Artists"; Lady Dilke's "Art in the Modern State."

(2) Classical Archæology, to be studied in Overbeck's "Schriftquellen" (a collection of passages from ancient authors bearing on Classical Art); Murray's "Handbook of Greek Archæology"; Murray's "History of Greek Sculpture," 2nd. ed. (London: John Murray.)

Questions will also be set in the special subject for the examination in Classical Archæology in April 1897 and April 1898, being "The Types of Greek Coins." This subject may be studied in Gardner's "The Types of Greek Coins."

The questions in Classical Archæology will be the same as those set in this subject for Honours in Classics (see p. 147), and the examination will be at the same time.

REGULATIONS FOR SCHOOLMASTER'S DIPLOMA.

Holders of the Diploma are qualified for schools as certificated teachers without further examination.

1. Candidates for the Schoolmaster's Diploma must be graduates in Arts of a Scottish, English, or Irish University, or of some other University approved of by the Senatus and the University Court.

2. Each Candidate must have matriculated in the University for the year in which he presents himself for the Diploma.

3. Each Candidate must have attended the Class of the Theory, Art, and History of Education in the University.

4. Each Candidate must pass an Examination in the Theory, Art, and History of Education, to be conducted by the Professor of that subject, and an Examiner appointed by the University Court.

5. The subjects of Examination are announced annually in the *University Calendar*.

6. Each Candidate must give evidence either—

(*a.*) That he has attended a Course of Practical Instruction as a Queen's Scholar in a Training College for Teachers; *or*

(*b.*) That he has gone through a complete course of Practical training in a Training College for Teachers—the Course to extend over not less than five months, and to include Demonstration and Criticism Lessons.

7. Each Candidate must further satisfy the University of his practical aptitude as a Teacher by teaching a class in some special Subject or

Subjects in which he has received instruction in the University, or in any Institution recognised by the University as qualifying for Degrees.

8. Each successful Candidate will receive a Diploma signed by the Vice-Chancellor of the University, or, in his absence, by the Principal or the Senior Professor. This Diploma is of two grades: (*a*) Secondary School Diploma, for Masters of Arts with Honours in any Department, testifying to their fitness for Secondary Schoolmasterships, and will state the Special Subjects in which the holder of the Diploma is qualified; (*b*) General Diploma, for those who have taken the ordinary Degree of M.A. When a Candidate requires special mention made of his competency to teach French or German, he is required to pass a practical examination in French or German pronunciation and conversation.

9. The Fee for the Diploma is £2, 2s.

The next Examination will begin on Friday, 26th March 1897, at 9 o'clock, and Candidates are required to enter their names and pay the Fee at the *Matriculation Office* on or before 5th March.

The subjects are the same as for Graduation (which see, page 142), but the Standard of Pass is much higher, *with the addition* of Milton's "Tractate"; Quintilian's "Institutions," Books I. and II.; and "The History of Education, Hellenic and Roman," as in the "Historical Survey of Pre-Christian Education, by the Professor; and the General Outlines of History, as in Quick's "Biographies," from 1750 A.D.

A short Thesis will be prescribed to be written in the Examination Room on an Educational subject.

REGULATIONS FOR CERTIFICATE OF "LITERATE IN ARTS." (L.A.)

The following are the Regulations for this Certificate:—

1. The Certificate is open to persons who have passed the Preliminary Examination, and who have subsequently attended for two Winter or one Winter and two Summer Sessions the usual qualifying courses of instruction in the Faculty of Arts in subjects in which they wish to qualify.

2. The number of subjects of examination shall be four, and the standard of examination shall be the Graduation standard.

3. Of the subjects selected, two shall be from two of the groups mentioned in Section VII. (2) of the Arts Regulations and the others may be any two mentioned in the Arts Regulations, with the addition of Music and Agriculture (the latter including a practical examination).

4. The fee for the Certificate of Literate in Arts is two guineas, or ten shillings and sixpence for each subject.

5. Candidates must be matriculated Students for the year in which they appear for examination.

The next Examination on Music will take place on 29th March 1897 from 9 to 12 o'clock, and in Agriculture in March 1897, at the same time as the Examination in that subject for the Degree of B.Sc.

Candidates who select Music as a subject will be examined on the Elements of Music (Notation, Measure, Scales, Modes, *Temps*, Forms, &c.); the Class Lectures, and the Professor's "Dictionary of Musical Terms, to which is prefaced an Introduction to the Elements of Music."

Harmony, its Theory and Practice; the Class Lectures, and Richter's "Treatise on Harmony."

History of Music, more particularly from Handel and Bach to the present time; the Class Lectures, Rockstro's "A General History of Music," and Riemann's "Catechism of Musical History" (Part II.: "History of Musical Forms").

Candidates who select Agriculture and Rural Economy will be examined on the Lectures of the Professor and the Saturday field excursions; Practical Laboratory work, to the extent involved by the use of the Laboratory Guide, "The Food of Plants," by A. P. Laurie, M.A., published by Macmillan & Co.; Wallace's "Farm Live Stock of Great Britain," 1893 edition—Crosby, Lockwood & Son; Fream's "Soils and their Properties"—Bell.

The names of Candidates must be given in, Certificates shown, and Fees paid for the Examinations in Autumn 1896, not later than 1st October, and in Spring 1897 not later than 5th March.

Competitive Examinations for Bursaries in Arts.

HONOURS LIST.

October 1895.

I.—Students Entering First Session.

A. General Bursary List.

(*Subjects of Examination*—English (full marks 100), Latin (100), Greek (100), Mathematics (100), French (50), German (50), Italian (50), and Dynamics (50), with additional papers in English, Latin, Greek, and Mathematics. Candidates select not more than five subjects. Those who select Latin, Greek, or Mathematics take the papers on these subjects on the Higher Standard.)

1. James Crerar, George Watson's College. } Equal.
   H. C. Liddell, George Watson's College. }
2. R. H. Macnair, George Watson's College.
3. J. Lochhead, George Watson's College.
4. R. C. S. Keith, Royal High School.
5. Th. B. Copeland, George Watson's College.
6. B. H. Richardson, George Watson's College.
7. J. S. Ross, Royal High School.
8. C. G. Mackay, George Watson's College.
9. J. Y. Bell, George Watson's College.
10. J. M. Darling, Royal High School.
11. J. W. Meldrum, Daniel Stewart's College.

12. W. Geddie, Daniel Stewart's College.
13. H. C. Norman, George Watson's College. / Alex. Waddell, George Watson's College. — Equal.
14. A. Cormack, Ayr Academy.
15. A. Gordon Cairns, George Watson's College.
16. R. M. Matheson, Kilblain Academy, Greenock.
17. J. H. Imrie, George Watson's College.
18. H. F. Eggeling, George Watson's College.
19. D. D. Paton, High School, Dundee.
20. W. N. Walsh, Daniel Stewart's College.
21. G. Wedderspoon, Inverness Royal Academy.
22. J. Pryde, Royal High School.
23. A. A. Fraser, George Watson's College.
24. C. F. Grant, High School, Dundee.
25. P. L. Cattanach, George Watson's College.
26. R. J. M. Horne, Daniel Stewart's College.

B. WELSH CLASSICAL BURSARIES.

(*Subjects of Examination*—English, Latin, and Greek, as for General Bursaries.)

James Crerar, George Watson's College.
R. C. S. Keith, Royal High School.
B. H. Richardson, George Watson's College.
C. G. Mackay, George Watson's College.
J. Y. Bell, George Watson's College.
J. S. Ross, Royal High School.
H. C. Liddell, George Watson's College.
J. Lochhead, George Watson's College.
J. W. Meldrum, Daniel Stewart's College.
R. H. Macnair, George Watson's College.
H. C. Norman, George Watson's College.
Th. B. Copeland, George Watson's College.
J. M. Darling, Royal High School.

C. WELSH MATHEMATICAL BURSARIES.

(*Subjects of Examination*—Mathematics, especially Pure Geometry.)

R. H. Macnair, George Watson's College.
H. C. Liddell, George Watson's College.
J. Lochhead, George Watson's College.
J. Crerar, George Watson's College.
Th. B. Copeland, George Watson's College.
J. M. Darling, Royal High School.
Alexander Waddell, George Watson's College.
B. H. Richardson, George Watson's College.
W. Geddie, Daniel Stewart's College.

D. GEORGE HERIOT BURSARIES (WOMEN).

(*Subjects as for First Year Open Bursaries.*)

Agnes M. Smith.
Janet B. Imrie.
Christina M. Ross.
Jessie A. Linton.
Euphemia W. Menzies.
Annie L. Mackay.
Harriet J. C. Maclaren.
Jane D. Love.
Mary G. Williamson.
Rosanna Clements.
Margaret C. Watson.
Annie B. Duncan.

E. HERIOT UNIVERSITY BURSARIES FOR WOMEN (MEDICINE).

(*Subjects of Examination*—The Preliminary Examination for Arts or Science.)

Harriet J. C. Maclaren.

II.—SECOND YEAR BURSARIES.

(*Subjects of Examination*—Latin, Greek, and Mathematics.)

A. B. Keith.
D. H. Macgregor.
Alexander Flint.
S. A. K. Wilson.
Victor Caldwell.

III.—Third Year Bursaries.

(*Subjects of Examination*—Classics, Mathematics, and Logic, with Psychology.)

C. M. Campbell. | W. A. Curtis.
S. G. Campbell. | J. Lornie.

IV.—Kelland Prize.

(*Subjects of Examination*—Mathematics, especially Higher Geometry.)

Alexander Sharp. | Edward Blades.

Preliminary Examination Papers for Degrees in Arts, Science, Law (B.L.), and Music, 1895-96.

ENGLISH.

FIRST PAPER.

Saturday, 28th September 1895.—9 *to* 11 *o'clock.*

(*Not more than* FIVE *questions are to be answered. Questions* 1, 2, *and* 3 *must be attempted by all.*)

1. Write an essay, from two to three pages long, on one of the following subjects:—

(*a*) Julius Cæsar, as represented by Shakespeare, compared with the Julius Cæsar of history.

(*b*) The Duke of Wellington.

(*c*) The respective advantages of a literary and a scientific education.

2. Paraphrase:—

"'Tis certain, greatness, once fallen out with fortune,
Must fall out with men too: what the declin'd is,
He shall as soon read in the eyes of others,
As feel in his own fall: for men, like butterflies,
Show not their mealy wings but to the summer;
And not a man, for being simply man,
Hath any honour; but honour for those honours
That are without him, as place, riches, and favour,
Prizes of accident as oft as merit:

Which, when they fall, as being slippery standers,
The love that lean'd on them as slippery too,
Do one pluck down another, and together
Die in the fall. But 'tis not so with me;
Fortune and I are friends; I do enjoy
At ample point all that I did possess
Save these men's looks; who do, methinks, find out
Something not worth in me such rich beholding
As they have often given."

3. Give a *general* analysis of the following passage, indicating clearly the connection between the clauses; and parse the words italicised:—

"*For that* I have not washed
My nose *that* bled, or foiled some debile wretch—
Which without note *here's many else* have done—
You *shout* me forth
In acclamations hyperbolical;
As if I loved my *little should be dieted*
In praises sauced with lies."

4. Derive *eight* of the following words:—*furthermost, rage, whisky, myself, sarcophagus, beef-eater, bridal, harbour, style, boycott, fortnight, yacht.*

5. Give instances of the use as different parts of speech of the following words:—*still, but, since, even, which, fare.*

Distinguish in meaning between *elicit* and *eliminate, invent* and *discover, common* and *mutual.*

6. Improve, where necessary, the following sentences, and give reasons for the changes that you make:—

(*a*) It is only after the Exile that we find angels and demons playing a more prominent part than before.

(*b*) I conceived a great regard for him, and could not but mourn for his loss.

(*c*) These are arguments which cannot be got over by all the cavils of infidelity.

(*d*) Many persons give evident proof that either they do not feel the power of the principles of religion, or that they do not believe them.

SECOND PAPER (OLD MODEL).

12 to 2 o'clock.

(*Not more than* EIGHT *questions to be answered, and of these* TWO *from each section.*

SECTION A.

1. Who were the Lake Poets? Give some account of the life and works of *one* of them.

2. Give some account of *one* of the following works:—*The Canterbury Tales, Comus, Gulliver's Travels, The Castle of Indolence, The Prisoner of Chillon, The Newcomes.*

3. Give the approximate dates and principal works of *three* of the following authors, and indicate briefly their importance in the history of literature:—Langland, Dunbar, Marlowe, Donne, Dryden, Richardson, Allan Ramsay, Thomson, Wordsworth.

4. Give some account of *three* of the following characters:—The Clerk of Oxenford, Bottom, Orlando, Imogen, Sir Roger de Coverley, Parson Adams, Tabitha Bramble, Sir Piercie Shafton, Amy Robsart, George Warrington, Maggie Tulliver.

SECTION B.

5. (*a*) Reproduce the substance of Mark Antony's speech over the body of Cæsar. Does he make any valid reply to the charge that Cæsar was aiming at a tyranny?

Or,

(*b*) Reproduce the substance of the dispute between Brutus and Cassius in the fourth Act. What light does it throw on the characters of the two men?

6. (*a*) Sketch the character of George Heriot, and indicate the part he plays in the story.

Or,

(*b*) Narrate the incidents of Nigel's meeting with the King in the park at Greenwich. What light does the scene throw on the characters of James, Charles, and Buckingham?

SECTION C.

7. Give some account of the struggle for colonial supremacy between Great Britain and France in the eighteenth century.

8. Write notes expository of *six* of the following:—The Trial of Sacheverell, the South-Sea Bubble, the Reformation of the Calendar, the Relations between Great Britain and Frederic the Great during the Seven Years' War, the Family Compact, the Ministry of all the Talents, the Treaty of Versailles, Grattan's Parliament, the Armed Neutrality, the Berlin Decree, Catholic Emancipation, the Manchester Massacre.

9. Write, upon *six* of the following, notes illustrative of their historical importance:—Lord Bolingbroke, General Wolfe, Robert Clive, Edmund Burke, Lord North, Charles James Fox, John Wilkes, Sir James Mackintosh, George Canning, William Wilberforce, Earl Grey.

10. Sketch the history of the struggle of Great Britain with France from the death of Louis XVI. till 1807.

SECTION D.

11. Distinguish clearly the various possessions in Africa south of the Equator held by European powers.

Give the chief towns and more important products of the various British dependencies and protectorates in South Africa.

12. Describe the basin of the Ganges *and* the basin of the St Lawrence, noting in each case the chief towns and products.

13. Write explanatory notes upon *five* of the following:—Gulf Stream, Trade Winds, North-West Passage, Eclipses of the Moon, Autumnal Equinox, the Midnight Sun, the Desert of Gobi, Rising of the Nile.

14. Locate and write a brief note upon *ten* of the following:—Uganda, Barbadoes, Bucharest, Khiva, Plateau of the Pamirs, Gothenburg, Cincinnati, Rio Colorado, Bangkok, Auckland, Kurrachee, Lima, Trinidad, Yellowstone Park, Queenstown, Kiel.

SECOND PAPER (NEW MODEL).

12 *to* 2 *o'clock.*

(*Not more than* EIGHT *questions are to be attempted. Of these,* THREE *must be taken from Section A,* THREE *from Section B, and* TWO *from Section C. Of the three from Section A, at least* ONE *must be a question on* JULIUS CÆSAR, *and at least* ONE *a question on* THE FORTUNES OF NIGEL.

SECTION A.

1. Give some account of *one* of the following works:—*The Canterbury Tales, Comus, Gulliver's Travels, The Task, The Prisoner of Chillon, Henry Esmond.*

2. Give some account of *three* of the following characters:—Arcite, Prospero, Cordelia, Autolycus, Dr Primrose, Will Wimble, Dominie Sampson, Rebecca, Mrs Poyser, Mark Tapley.

3. "Brutus is an idealist." Illustrate this from the play.

4. Reproduce the substance of Mark Antony's speech over the body of Cæsar. Does he make any valid reply to the charge that Cæsar was aiming at a tyranny?

5. Reproduce the substance of the dispute between Brutus and Cassius in the Fourth Act. What light does it throw upon the characters of the two men?

6. Sketch the character of George Heriot, and indicate the part he plays in the story.

7. Narrate the incidents of Nigel's meeting with the King at Greenwich Park. What light does the scene throw upon the characters of James, Charles, and Buckingham?

8. Sketch the character and fortunes of Martha Trapbois.

SECTION B.

9. Sketch the history of British power on the mainland of North America during the eighteenth century.

10. Trace the growth of British power in India during the reigns of the first three Georges.

11. Write notes expository of *six* of the following:—The Trial of Sacheverell, the South-Sea Bubble, the Reformation

of the Calendar, the Relations between Great Britain and Frederick the Great during the Seven Years' War, the Declaration of Independence, the Berlin Decree, the Six Acts, the Impeachment of Warren Hastings, the Irish Rebellion of 1798, the Peace of Amiens, the Manchester Massacre.

12. Write, upon *six* of the following, notes illustrative of their historical importance:—Lord Bolingbroke, General Wolfe, Robert Clive, Edmund Burke, Lord North, Charles James Fox, John Wilkes, Sir James Mackintosh, George Canning, William Wilberforce, Earl Grey.

13. Give an account in their chronological succession of the various continental wars in which Great Britain took part from the accession of George I. to the death of Pitt, Earl of Chatham.

14. Give some account of the political and social condition of Britain from Waterloo to the passing of the Reform Bill. What do you know of Burdett, Brougham, Huskisson, O'Connell?

Section C.

15. Distinguish clearly the various possessions, in Africa south of the Equator, held by European powers. Give the chief towns and more important products of the various British dependencies and protectorates in South Africa.

16. Describe the basin of the Ganges *and* the basin of the St Lawrence, noting in each case the chief towns and products.

17. Write explanatory notes upon *five* of the following:—Gulf Stream, Trade Winds, North-West Passage, Eclipses of the Moon, Autumnal Equinox, the Midnight Sun, the Desert of Gobi, the Rising of the Nile.

18. Locate and write a brief note upon *ten* of the following:—Uganda, Barbadoes, Bucharest, Khiva, Plateau of the Pamirs, Gothenburg, Cincinnati, Rio Colorado, Bangkok, Kurrachee, Auckland, Lima, Trinidad, the Yellowstone Park, Queenstown, Kiel.

FIRST PAPER.

SATURDAY, *28th March* 1896.—9 *to* 11 *o'clock.*

Not more than FIVE *questions to be answered. Questions* 1, 2 *and* 6 *must be attempted by all.*

1. Write an essay, from two to three pages long, on *one* of the following subjects:—

(*a*) French and English national characteristics as represented by Shakespeare in *Henry V.*

(*b*) The Historical Novel with special reference to *The Fair Maid of Perth.*

(*c*) The influence of the geography of the British Islands on their history.

2. Paraphrase:—

The Poet to his dead Friend.

Dost thou look back on what has been,
As some divinely gifted man,
Whose life in low estate began
And on a simple village green;
Who breaks his birth's invidious bar,
And grasps the skirts of happy chance,
And breasts the blows of circumstance,
And grapples with his evil star;
Who makes by force his merit known
And lives to clutch the golden keys,
To mould a mighty state's decrees,
And shape the whisper of the throne;
And moving up from high to higher,
Becomes on Fortune's crowing slope
The pillar of a people's hope,
The centre of a world's desire;
Yet feels as in a pensive dream,
When all his active powers are still,
A distant dearness in the hill,
A secret sweetness in the stream

The limit of his narrower fate,
While yet beside its vocal springs
He play'd at counsellors and kings
With one that was his earliest mate?

3. Give a general analysis of the following passage, indicating clearly the connection between the clauses; parse the words italicised:—

There is given
Unto the things of earth *which* time hath bent
A spirit's feeling, and where he hath leant
His hand, but *broke* his scythe, there is a power
And magic in the ruin'd battlement,
For which the palace of the present hour
Must yield its pomp and wait *till ages* are its dower.

4. (*a*) In the following sentence point out the prefixes and the suffixes and give the meaning or force of each of them:—

"Long may we be enabled to improve our present blessings, to cultivate the arts of peace, to give to commerce, now reviving, greater extension and new spheres of employment, and to confirm the prosperity now generally diffused."

Or, (*b*) Derive eight of the following words: Island, sirloin, soar, newt, tantalise, miscreant, quandary, care, panacea, strange, pedagogue, tartan.

5. Parse the words italicised in the following sentences: (1) There was no one *but* did his best. (2) I can give you fifty reasons *why* I disbelieve the report. (3) This book is dull *to read*. (4) He must *needs* go. (5) *It* will be provoking if he does not come. (6) *The* more I ponder the matter *the* less I am satisfied. (7) *As* a rule he acts admirably.

And, (*b*) Define and exemplify Noun Clause, Adverbial Phrase, Doublet, Strong Verb, Hybrid.

6. Improve where necessary the following sentences, and give reasons for the changes you make:—

(*a*) He entirely failed to see that before dealing with physical astronomy, it must be dealt with mathematically.

(*b*) Longfellow has given more people a taste for poetry,

and purified and comforted more young minds, than any poet of modern times.

(*c*) The opinion that the sun is fixed was once too universal to be easily shaken, and a similar prejudice has often rendered the progress of new inventions very slow, arising from the numbers of the believers, and not the reasonableness of the belief.

(*d*) I would be sorry to accept a belief different than this, that if a man once knew a habit to be injurious he was capable of emancipating himself from it.

SECOND PAPER (OLD MODEL).

SATURDAY, 28*th March* 1896.—12 *to* 2 *o'clock.*

Not more than EIGHT *questions to be answered, and of these* TWO *from each section.*

SECTION A.

1. Give some account of the life and works of Cowper, or Pope, or Keats.

2. Give some account of one of the following works: *The Faerie Queene, Samson Agonistes, Hudibras, The Vicar of Wakefield, Barnaby Rudge, The Idylls of the King.*

3. Name the authors, and give the approximate dates of *ten* of the following works:

The Campaign, Novum Organum, Aurora Leigh, The Bride of Abydos, The Pleasures of Hope, Sartor Resartus, The Task, The Hind and the Panther, Adam Bede, Rasselas, Every Man in his Humour, Westward Ho!, The Gentle Shepherd, The Rape of the Lock, Adonais.

4. Give some account of *three* of the following characters: Caleb Balderstone, Falstaff, Diana Vernon, Duessa, Griselda, Colonel Dobbin, Tom Pinch, Sir John Chester, Iago, Sir Roger de Coverley.

SECTION B.

5. (*a*) Sketch the character of Fluellen, and indicate what part he plays in *Henry V.*

Or, (*b*) Reproduce as nearly in Shakespeare's words as

you can Henry's reflections on ceremony, and describe fully the circumstances in which the speech was delivered.

6. (*a*) Write a full account of Conachar.

Or, (*b*) Narrate what took place at Falkland Castle.

SECTION C.

7. Give some account of the relations between England and Scotland from 1290 to 1328.

8. Write notes on six of the following: Peace of Wedmore, Magna Charta, Provisions of Oxford, Jack Cade's Revolt, Poyning's Law, Benevolences, Battle of Bouvines, the Suppression of the Monasteries, Statute of the Six Articles, Roman Occupation of Britain, Battle of Pinkie.

9. Write notes on six of the following:—Caractacus, Alfred the Great, David I., Anselm, Becket, Wiclif, Wat Tyler, Thomas Cromwell, Strongbow, John Knox, Regent Murray, Earl of Warwick (the Kingmaker), the Black Prince.

10. Give some account of the war between England and France during the reigns of Henry V. and Henry VI.

SECTION D.

11. Name the chief articles sent to this country from (*a*) India, (*b*) Australia, (*c*) Canada, (*d*) the West Indies, (*e*) South Africa.

In each case name at least four articles.

12. Write a full account of New South Wales or of Natal.

13. Locate, and write a brief note on, *ten* of the following:—Adelaide, the Falkland Islands, Cotopaxi, Aden, the Great Karoo, Chitral, the Congo Free State, Mecca, the Hindu Kush, Siberia, Tientsin, Heidelberg, Moulmein, Bergen, Corunna.

14. Describe (*a*) the Mountain Systems, (*b*) the River Systems of Europe.

SECOND PAPER (NEW MODEL).

SATURDAY, 28*th March* 1896.—12 *to* 2 *o'clock.*

Not more than EIGHT *questions are to be attempted. Of these,* THREE *must be taken from Section A,* THREE *from Section B, and* TWO *from Section C. Of the* THREE *from*

Section A, at least ONE *must be a question on Henry V., and at least* ONE *a question on "The Fair Maid of Perth."*

SECTION A.

1. Give some account of *one* of the following works:—*The Faerie Queene, Samson Agonistes, Hudibras, The Vicar of Wakefield, Barnaby Rudge, The Idylls of the King.*

2. Give some account of *three* of the following characters:—Caleb Balderstone, Falstaff, Diana Vernon, Duessa, Griselda, Colonel Dobbin, Tom Pinch, Sir John Chester, Iago, Sir Roger de Coverley.

3. "We cannot help noting the weakness of this play as a drama." Examine this criticism of *Henry V.*

4. Sketch the character of Fluellen, and indicate what part he plays in "Henry V."

5. Reproduce, as nearly in Shakespeare's words as you can, Henry's reflections on ceremony, and describe fully the circumstances in which the speech was delivered.

6. Write a full account of Conachar.

7. Narrate what took place at Falkland Castle.

8. Sketch the character and fortunes of Henbane Dwining.

SECTION B.

9. Write a short life of James I. of Scotland.

10. Sketch the progress of the war between England and France during the reigns of Edward III. and Richard II.

11. Write notes on *six* of the following:—Peace of Wedmore, Magna Charta, Provisions of Oxford, Jack Cade's Revolt, Poyning's Law, Benevolences, Battle of Bouvines, The Suppression of the Monasteries, Statute of the Six Articles, Roman Occupation of Britain, Battle of Pinkie.

12. Write notes on *six* of the following:—Caractacus, Alfred the Great, David I., Anselm, Becket, Wiclif, Wat Tyler, Thomas Cromwell, Strongbow, John Knox, Regent Murray, Earl of Warwick (the Kingmaker), The Black Prince.

13. Give some account of the Wars of the Roses.

14. Sketch the political and social condition of England during the second half of the fourteenth century.

SECTION C.

15. Name the chief articles sent to this country from (*a*) India, (*b*) Australia, (*c*) Canada, (*d*) the West Indies, (*e*) South Africa.

In each case name at least four articles.

16. Write a full account of New South Wales *or* of Natal.

17. Locate, and write a brief note on, *ten* of the following:—Adelaide, the Falkland Islands, Cotopaxi, Aden, the Great Karoo, Chitral, the Congo Free State, Mecca, the Hindu Kush, Siberia, Tientsin, Heidelberg, Moulmein, Bergen, Corunna.

18. Describe (*a*) the Mountain Systems, (*b*) the River Systems of Europe.

LATIN (HIGHER STANDARD).

FIRST PAPER.

TUESDAY, 1*st October* 1895.—9 *to* 11 *o'clock.*

I. Translate into English:—

Quinctius sets free Corinth, Chalcis, and Demetrias.

Nondum conventus dimissus erat, quum respiciunt praesidium, ab Acrocorintho descendens, protinus ad portam duci atque abire. Quorum agmen imperator secutus, prosequentibus cunctis, servatorem liberatoremque acclamantibus, salutatis dimissisque iis, eadem, qua venerat, via Elatiam rediit. Inde cum omnibus copiis Ap. Claudium legatum dimittit. Per Thessaliam atque Epirum ducere Oricum iubet, atque ibi se opperiri: inde namque in animo esse exercitum in Italiam traiicere. Et L. Quinctio fratri, legato et praefecto classis scribit, ut onerarias ex omni Graeciae ora eodem contraheret. Ipse Chalcidem profectus, deductis non a Chalcide solum, sed etiam ab Oreo atque Eretria, praesidiis, conventum ibi Euboicarum civitatum habuit; commonitosque, in quo statu rerum accepisset eos, et in quo

relinqueret, dimisit. Demetriadem inde proficiscitur; deductoque praesidio prosequentibus cunctis, sicut Corinthi et Chalcide, pergit ire in Thessaliam; ubi non liberandae modo civitates erant, sed ex omni colluvione et confusione in aliquam tolerabilem formam redigendae. Nec enim temporum modo vitiis, ac violentia, et licentia regia turbati erant; sed inquieto etiam ingenio gentis, nec comitia, nec conventum, nec concilium ullum, non per seditionem ac tumultum, iam inde a principio ad nostram usque aetatem traducentis. LIVY, xxxiv., 51.

II. Translate also :—

Æneas is wounded by an unknown Rutulian.

At pius Æneas dextram tendebat inermem
Nudato capite, atque suos clamore vocabat:
"Quo ruitis? quaeve ista repens discordia surgit?
O cohibete iras! ictum iam fœdus et omnes
Compositae leges; mihi ius concurrere soli:
Me sinite atque auferte metus: ego fœdera faxo
Firma manu: Turnum debent haec iam mihi sacra."
Has inter voces, media inter talia verba,
Ecce viro stridens alis adlapsa sagitta est,
Incertum qua pulsa manu, quo turbine adacta,
Quis tantam Rutulis laudem, casusne deusne,
Attulerit: pressa est insignis gloria facti,
Nec sese Æneae iactavit vulnere quisquam.
VIRGIL, *Æn.* xii., 311-323.

Scan the last two lines.

SECOND PAPER.

12 *to* 2 *o'clock.*

I. Translate into Latin Prose :—

Philip, having raised the siege of Palé, called a council of war to consider in what direction he should next turn his victorious arms. The Messenians represented that in one day the forces might march from Cephallenia into their country, and at once overpower Lycurgus, who did not

expect to be so suddenly attacked. Leontius enforced this advice very strongly. His secret reason was, that, since it would be impossible for Philip to return, as the winds would be directly contrary at the time, he would be forced to remain there, by which means the campaign would be brought to an end and nothing accomplished. The Acarnanians, on the contrary, urged him to march at once into Aetolia, declaring that the whole country might be laid waste without the least resistance, and that thus Dorimachus would be prevented from making an irruption into Macedonia. Aratus did not fail to declare in favour of the latter opinion; and the king, who from the time of the cowardly attack upon Palé had begun to suspect Leontius, acquiesced in the advice of Aratus.

II. (*a*) Show by means of short sentences what are the principal uses of the *Ablative* in Latin.

(*b*) State, with illustrative examples, when the relative *qui*, *quae*, *quod*, must be followed by the subjunctive.

(*c*) Give the other degrees (or degree) of comparison of *nequior*, *habilior*, *plus*, *acerrimus*, *ocior*, *maledicentior*, *novissimus*, *hebetior*, *gracilior*, *crebrius*, *levius*, *peius*.

(*d*) Mark the quantity of the second syllable in *subtilis*, *radices*, *infelix*, *Thalia*, *pagina*, *irrito* (verb); and distinguish between *ĕs* and *ēs*, *vĕlis* and *vēlis*, *ŏvīs* and *ōvīs*, *ănŭs* and *cānīs*, *lăbor* and *lābor*.

III. Translate, with brief notes where deemed necessary:—

1. Verba mihi dari facile patior.
2. Sub corona captivi venibant.
3. Ad unguem factus homo.
4. Adulescens patre suo imperatore meruit.

IV. Translate into Latin:—

(*a*) When will our army return home? Will it be on the 8th of October?

(*b*) You don't mean to say that Cicero was a bad citizen? I, at least, cannot believe such a statement.

(*c*) Whether the soldiers named by the general were

Persians or Greeks, they certainly displayed extraordinary courage.

(*d*) Caesar was undoubtedly too ambitious, but he was at the same time too prudent openly to reveal his purposes.

FIRST PAPER.

TUESDAY, 31*st March* 1896.—9 *to* 11 *o'clock.*

1. Translate into English:—

(1) LIVY. Book XXXVIII., 51.

Impeachment of Scipio.

Tribuni plebis vetera luxuriae crimina Syracusanorum hibernorum et Locris Pleminianum tumultum cum ad fidem praesentium criminum rettulissent, suspitionibus magis quam argumentis pecuniae captae reum accusarunt: filium captum sine pretio redditum omnibusque aliis rebus Scipionem, tamquam in eius unius manu pax Romana bellumque esset, ab Antiocho cultum. dictatorem eum consuli, non legatum in provincia fuisse; nec ad aliam rem eo profectum quam ut, id quod Hispaniae, Galliae, Siciliae, Africae iam pridem persuasum esset, hoc Graeciae Asiaeque et omnibus ad orientem versis regibus gentibusque adpareret, unum hominem caput columenque imperii Romani esse, sub umbra Scipionis civitatem dominam orbis terrarum latere, nutum eius pro decretis patrum, pro populi iussis esse. infamia intactum invidia, qua possunt, urgent. orationibus in noctem perductis prodicta dies est.

(2) HORACE. Epistles II., 2.

Dixi me pigrum proficiscenti tibi; dixi
Talibus officiis prope mancum: ne mea saevus
Jurgares ad te quod epistola nulla veniret.
Quid tum profeci, mecum facientia jura
Si tamen attentas? Quereris super hoc etiam, quod
Exspectata tibi non mittam carmina mendax.
Luculli miles collecta viatica multis
Aerumnis, lassus dum noctu stertit, ad assem
Perdiderat: post hoc vehemens lupus, et sibi et hosti

Iratus pariter, jejunis dentibus acer,
Praesidium regale loco dejecit, ut aiunt.
Clarus ob id factum, donis ornatur honestis;
Accipit et bis dena super sestertia nummûm.
Forte sub hoc tempus castellum evertere, praetor,
Nescio quod cupiens, hortari coepit eundem
Verbis, quae timido quoque possent addere mentem:
'I, bone, quo virtus tua te vocat: i pede fausto,
Grandia laturus meritorem praemia: quid stas?'
Post haec ille catus, quantumvis rusticus, 'ibit,
Ibit eo quo vis qui zonam perdidit,' inquit.

SECOND PAPER.

TUESDAY, 31*st March* 1896.—12 *to* 2 *o'clock.*

I. Translate into Latin Prose:—

So great was the difficulty of the situation felt to be, that a large number of the fathers seemed inclined to yield to the demands of Cineas, or at any rate to allow Pyrrhus to come to Rome in person to urge them. But Appius Claudius, now old and blind, hearing of this wavering in the Senate, caused himself to be carried into the Senate-house, surrounded by his sons and sons-in-law, and delivered an impassioned speech. "He had never before," he said, "been glad of his blindness; but now he could wish that he had been deaf also, that he might not hear their decrees which would destroy the glory of Rome. They had been used to boast that, if Alexander had come to Italy, his fame for invincibility would have been at an end; yet they were going to yield to a mean Epirote, the hanger-on of one of Alexander's field officers, who was in Italy because he could not maintain himself in Greece, and whose power had not sufficed to retain even a portion of Macedonia. If Pyrrhus, so far from being punished, were actually rewarded for his presumption, they would not have freed themselves of him, they would only have brought upon themselves the Tarentines and Samnites, who would justly despise them."

II. (*a*) Construct short sentences to exhibit (1) *two* cases used with *sub*; (2) *two* uses of *dum* with the Subjunctive; (3) *two* uses of *ut* with the Indicative, and *two* with the Subjunctive.

(*b*) Exemplify the case constructions used with: *indigeo, interest, praesto, rideo, plaudo, caveo, impono, impero.*

(*c*) Mark the quantity of the second syllable of: *redĭte, sarcĭna, petītor, proceres, mendīcus, ancŏra, vectīgal, Aeneas;* and distinguish the meaning of *mānĕ* and *mānē*: *rēgis* and *rĕgis; lepŏre* and *lepōre; pālus* and *pălus.*

III. Translate, with a brief note on the Syntax:—

(1) Dum loquimur, fugerit, invida aetas.

(2) Mediocribus esse poetis non homines non di concessere.

(3) Invitum qui servat idem facit occidenti.

IV. Translate into Latin:—

(1) The good king declared that the more favours he bestowed, the more he was asked to bestow.

(2) If you were wise, you would study philosophy instead of wasting your time in idleness.

(3) The general was afraid that the supplies would not long suffice for such a large army.

(4) Proclamation was made that the lives of all who surrendered would be spared.

Lower Standard.

Monday, 30*th September* 1895.—9 *to* 12 *o'clock.*

I. Translate into English:—

How Chabrias met his Death.

Oppugnabant Athenienses Chium. Erat in classe Chabrias privatus, sed omnes qui in magistratu erant auctoritate anteibat, eumque magis milites quam qui praeerant suspiciebant. Quae res ei maturavit mortem. Nam dum primus studet portum intrare, gubernatoremque iubet eo dirigere

navem, ipse sibi perniciei fuit: cum enim eo penetrasset, ceterae non sunt secutae. Quo facto circumfusus hostium concursu cum fortissime pugnaret, navis rostro percussa coepit sidere. Hinc refugere cum posset, si se in mare deiecisset, quod suberat classis Atheniensium, quae exciperet natantes, perire maluit quam armis abiectis navem relinquere in qua fuerat vectus. Id ceteri facere noluerunt, qui nando in tutum pervenerunt. At ille, praestare honestam mortem existimans turpi vitae, comminus pugnans telis hostium interfectus est.

Account for the cases of *perniciei* and *mare* in the above.

Give the derivations of *suspiciebant*, *existimans*, *comminus*.

II. Translate into Latin:—

The Athenian fleet, consisting of 100 ships of war, and having on board 1500 picked Athenian soldiers, as well as auxiliaries, at length set sail, and proceeded to Corcyra, where it was joined by the other allies in the month of July, 415 B.C. Upon arriving at Rhegium, the generals received the discouraging news that the town of Egesta was unable to contribute more than thirty talents. Having met for counsel at this crisis, they finally resolved to gain as many allies as they could among the Greek cities in Sicily, and, after having in this way ascertained what assistance they could rely upon, to attack Syracuse as soon as possible.

III. *Grammar.*

1. Give the Genitive (sing. and pl.) and the gender of *imber*, *nemus*, *domus*, *rete*, *eques*, *vis*, *canis*, *ōs*, *mos*, *dies*.

2. Compare *vetus*, *magnificus*, *dives*, *arduus*, *difficulter*. Give the Latin for 30 each, 300 each, 13 times, 11th, 100th.

3. Conjugate:—*pando*, *tendo*, *colo*, *findo*, *emo*, *demo*, *tego*, *texo*, *fido*, *largior*, *metior*, *assentior*.

4. Distinguish between *hic*, *ille*, *is*, and *iste*; and between the use of *utrum* and *sive*. Explain these datives:—*tibi* uni parebo; *Caesari* omnia erant agenda; *odio* Hannibal erat *Romanis*.

IV. *Sentences.*

Translate into Latin :—

1. Which of you two said that Pompey would be mindful of us?
2. On gaining possession of the camp, the Romans spared no one.
3. He asked me if I knew who that man was.
4. He bought that ground for a small sum.
5. The town is surrounded by a wall ten feet high.

MONDAY, 30*th March* 1896.—9 *to* 12 *o'clock.*

I. Translate into English :—

Alexander addresses his army.

Moderationis meae certissimum indicium est, quod ne victis quidem superbe impero. Veni enim in Asiam non ut funditus everterem gentes nec ut dimidiam partem terrarum solitudinem facerem, sed ut illos quos bello *subegissem*, *victoriae* meae non paeniteret. Itaque militant vobiscum, pro imperio vestro sanguinem fundunt, qui superbe tractati *rebellassent.* Non est diuturna possessio in quam gladio inducimur : *beneficiorum* gratia sempiterna est. Si habere Asiam non transire volumus, cum his communicanda est nostra clementia : horum fides stabile et aeternum faciet imperium. Et sane plus habemus quam cupimus. Insatiabilis autem *avaritiae* est adhuc implere velle quod iam circumfluit. Me vero reprehenditis quod Persarum mores in Macedonas transferam. In multis enim gentibus esse video quae non erubescamus * imitari : nec aliter tantum imperium apte regi potest quam ut quaedam et tradamus illis et ab iisdem discamus. CURTIUS, VIII., 8-10.

Account for the *mood* of the verbs, and the *case* of the nouns underlined.

II. Translate into Latin :—

Then certain of the queen's maidens went up and told Penelope what had happened, and how her lord Ulysses had come home and slain the suitors.† But she gave no

* *erubescere*=to blush. † suitors=*proci,-orum.*

heed to their words, but thought that some frenzy possessed them, or that they mocked her; for it is the property of intense grief not to believe when any great joy cometh. And she rated them exceedingly for troubling her. But they the more persisted in declaring the truth of what they had affirmed. They said: "That poor guest whom you talked with last night was Ulysses." Then she was yet more fully persuaded that they mocked her. But they said: "This thing is true which we have told. We sat within, and heard the groans of those that were killed, but saw nothing till your son told us to come in. On entering we saw Ulysses standing in the midst of the slaughtered."

III. *Grammar.*

1. Give the meaning, gender, genitive singular, and ablative plural of:—*Faber, vulnus, grex, ordo, tribus, nix, cinis, frons, dos, femur.*

2. Conjugate and give the meaning of:—*Mico, haereo, urgeo, soleo, texo, confido, ludo, molo, vinco, vincio.*

3. Compare *utilis, sacer, tener, dirus.* Give all the adverbs formed from *alius* and *idem.* Give the Latin for *nineteenth, twenty times, one million, two-thirds.*

4. Give the exact meaning of:—*Uterque, quisque, ambo, aliquis, quidam, quisquis, quisquam, quotus, quotusquisque, simul, semel, demum.* What cases are used with *potiri, misereri, privare, circumdare?*

IV. *Sentences.*

1. Can any one believe that such a strong city will ever be captured?

2. It is of no importance to me whether you go to the country or stay at home.

3. There are some who think that the slave is more foolish than wicked.

4. If we take the city, we will spare all the inhabitants.

5. Ask your brother whether he has read the book I sent him.

GREEK.

HIGHER STANDARD.

FIRST PAPER.

WEDNESDAY, *2nd October* 1895.—9 *to* 11 *o'clock.*

I. Translate :—

If Athens were an island.

Ἑνὸς δὲ ἐνδεεῖς εἰσιν· εἰ γὰρ νῆσον οἰκοῦντες θαλαττοκράτορες ἦσαν Ἀθηναῖοι, ὑπῆρχεν ἂν αὐτοῖς ποιεῖν μὲν κακῶς, εἰ ἠβούλοντο, πάσχειν δὲ μηδὲν, ἕως τῆς θαλάσσης ἦρχον, μηδὲ τμηθῆναι τὴν ἑαυτῶν γῆν, μηδὲ προσδέχεσθαι τοὺς πολεμίους. νῦν δὲ οἱ γεωργοῦντες καὶ οἱ πλούσιοι Ἀθηναίων ὑπέρχονται[1] τοὺς πολεμίους μᾶλλον. ὁ δὲ δῆμος, ἅτε εὖ εἰδὼς ὅτι οὐδὲν τῶν σφῶν ἐμπρήσουσιν οὐδὲ τεμοῦσιν, ἀδεῶς ζῇ καὶ οὐχ ὑπερχόμενος αὐτούς. Πρὸς δὲ τούτοις, καὶ ἑτέρου δέους ἀπηλλαγμένοι ἂν ἦσαν, εἰ νῆσον ᾤκουν, μηδέποτε προδοθῆναι τὴν πόλιν ὑπ' ὀλίγων, μηδὲ πύλας ἀνοιχθῆναι, μηδὲ πολεμίους ἐπεισπεσεῖν· (πῶς γὰρ, νῆσον οἰκούντων, ταῦτ' ἂν ἐγίγνετο;) μηδ' αὖ στασιάσαι τῷ δήμῳ μηδὲν, εἰ νῆσον ᾤκουν. νῦν μὲν γὰρ, εἰ στασιάσαιεν, ἐλπίδα ἂν ἔχοντες ἐν τοῖς πολεμίοις στασιάσειαν, ὡς κατὰ γῆν ἐπαξόμενοι. εἰ δὲ νῆσον ᾤκουν, καὶ ταῦτα ἂν ἀδεῶς αὐτοῖς εἶχεν. Ἐπειδὴ οὖν ἐξ ἀρχῆς οὐκ ἔτυχον οἰκήσαντες νῆσον, νῦν τάδε ποιοῦσι. τὴν μὲν οὐσίαν ταῖς νήσοις παρατίθενται,[2] πιστεύοντες τῇ ἀρχῇ τῇ κατὰ θάλατταν, τὴν δὲ Ἀττικὴν γῆν περιορῶσι τεμνομένην, γιγνώσκοντες ὅτι, εἰ αὐτὴν ἐλεήσουσιν, ἑτέρων ἀγαθῶν μειζόνων στερήσονται.

[1] ὑπέρχεσθαι, to cringe to. [2] παρατίθεσθαι, to deposit.

II. Translate either (*a*) or (*b*) :—

(*a*) *Thetis comforts Peleus.*

σὲ δ', ὡς ἂν εἰδῇς τῆς ἐμῆς εὐνῆς χάριν,
κακῶν ἀπαλλάξασα τῶν βροτησίων,
ἀθάνατον ἄφθιτόν τε ποιήσω θεόν.
κἄπειτα Νηρέως ἐν δόμοις ἐμοῦ μέτα
τὸ λοιπὸν ἥδη θεὸς συνοικήσεις θεῷ.
ἔνθεν κομίζων ξηρὸν ἐκ πόντου πόδα
τὸν φίλτατον σοὶ παῖδ' ἐμοί τ' Ἀχιλλέα
ὄψει δόμους ναίοντα νησιωτικοὺς
Λευκὴν κατ' ἀκτὴν ἐντὸς Εὐξείνου πόρου.
ἀλλ' ἕρπε Δελφῶν ἐς θεόδμητον πόλιν,
νεκρὸν κομίζων τόνδε, καὶ κρύψας χθονὶ,

ἐλθὼν παλαιᾶς χοιράδος κοῖλον μυχὸν
Σηπιάδος ἴζου· μίμνε δ', ἐς τ' ἂν ἐξ ἁλὸς
λαβοῦσα πεντήκοντα Νηρῄδων χορὸν
ἔλθω κομιστὴν σου· τὸ γὰρ πεπρωμένον
δεῖ σ' ἐκκομίζειν· Ζηνὶ γὰρ δοκεῖ τάδε.
παῦσαι δὲ λύπης τῶν τεθνηκότων ὕπερ.
πᾶσιν γὰρ ἀνθρώποισιν ἥδε πρὸς θεῶν
ψῆφος κέκρανται, κατθανεῖν ὀφείλεται.

EURIP., *Andromache*, 1253-72.

(*b*) *End of the fight between Hector and Ajax.*

Τὸν δ' αὖτε προσέειπε μέγας κορυθαίολος Ἕκτωρ·
"Αἶαν, ἐπεί τοι δῶκε θεὸς μέγεθός τε βίην τε
καὶ πινυτήν, περὶ δ' ἔγχει Ἀχαιῶν φέρτατός ἐσσι,
νῦν μὲν παυσώμεσθα μάχης καὶ δηϊοτῆτος
σήμερον. ὕστερον αὖτε μαχησόμεθ' ἐς ὅ κε δαίμων
ἄμμε διακρίνῃ, δώῃ δ' ἑτέροισί γε νίκην.
νύξ δ' ἤδη τελέθει· ἀγαθὸν καὶ νυκτὶ πιθέσθαι,
ὡς σύ τ' ἐϋφρήνῃς πάντας παρὰ νηυσὶν Ἀχαιούς,
σούς τε μάλιστα ἕτας καὶ ἑταίρους οἵ τοι ἔασιν·
αὐτὰρ ἐγὼ κατὰ ἄστυ μέγα Πριάμοιο ἄνακτος
Τρῶας ἐϋφρανέω καὶ Τρωάδας ἑλκεσιπέπλους,
αἵ τε μοι εὐχόμεναι θεῖον δύσονται ἀγῶνα.
δῶρα δ' ἄγ' ἀλλήλοισι περικλυτὰ δώομεν ἄμφω,
ὄφρα τις ὧδ' εἴπῃσιν Ἀχαιῶν τε Τρώων τε·
"ἦμὲν ἐμαρνάσθην ἔριδος περὶ θυμοβόροιο,
ἠδ' αὖτ' ἐν φιλότητι διέτμαγεν ἀρθμήσαντε."[1]

[1] ἀρθμεῖν, to be united.

IL. vii. 287-302.

SECOND PAPER.

WEDNESDAY, *2nd October* 1895.—12 *to* 2 *o'clock.*

I. SENTENCES.

1. They ought to have been here already, but if they come within a month I shall be satisfied.

2. In the presence of the whole family, he forbade his son ever to enter the house again; he had incurred, he said, the charge of cowardice.

3. I wish I had been there, that I might have shared

with you the glory of that deed, even if I had chanced to fall along with you.

4. I shall certainly not advise him to punish such a man as you for so small a fault.

5. He refuses to acquit (ἀπαλλάττειν) them of their oath till they pay him ten talents apiece by way of ransom.

6. I know not of what you accuse me; but whatever it is, I know that I am innocent.

II. Grammar.

1. Give genitive and accusative, singular and plural, of πρᾶος, οὖς, γραῦς, ὑγιής, ἑστώς.

2. Parse, and give the chief parts in use of, ἀποδράς, ἑάλως, ἔδεται, μέμνησο, ταθείς.

3. Explain and exemplify the force of the suffixes -τρις, -τρον, -συνη, -ιδης, -ισκος. Make words from the stem ποιε- to denote (1) made; (2) maker; (3) thing made; (4) act of making; (5) apt to make.

4. Enumerate and illustrate the chief modes of forming the present stem of verbs from the simple stem.

5. Translate; God forbid; no, by Zeus; on my account; by my means; in my power.

6. Translate and explain the grammar of: πέμπτην ἤδη ἡμέραν ἄπεστι: αὐτοῖς ἵπποις ἴωμεν: οὐ μὴ τοῦτο γένηται: ἀποθανεῖ μὴ φαγών: ὡς ἐμοῦ ἰόντος, τὴν γνώμην ἔχετε: ἀνέστησαν αὐτοὺς ἐφ' ᾧ μηδὲν κακὸν ποιήσουσιν. What is the force of the optative in: ἡδέως ἂν ἔγωγ' ἐροίμην: κήρυκας ἔπεμψαν εἰ πίθοιεν Πηλείδην: μηκέτι ζῷην: οἵς τινας ἴδοι, τίνες εἶεν ἠρώτα?

Higher Standard—First Paper.

Wednesday, 1*st April* 1896.— 9 *to* 11 *o'clock.*

1. Translate:—

Socrates claims one saving grace.

ΣΩ. Ὁρᾷς, ὦ Ἱππία, ὅτι ἐγὼ ἀληθῆ λέγω, λέγων ὡς λιπαρής[1] εἰμι πρὸς τὰς ἐρωτήσεις τῶν σοφῶν; καὶ κινδυνεύω ἓν μόνον ἔχειν τοῦτο ἀγαθόν, τἆλλα ἔχων πάνυ φαῦλα· τῶν μὲν γὰρ πραγμάτων ᾗ ἔχει ἔσφαλμαι, καὶ

[1] λιπαρής, earnest.

οὐκ οἶδ' ὅπῃ ἐστί. τεκμήριον δέ μοι τούτου ἱκανόν, ὅτι ἐπειδὰν συγγένωμαί τῳ ὑμῶν τῶν νὺδοκιμούντων ἐπὶ σοφίᾳ καὶ οἷς οἱ Ἕλληνες πάντες μάρτυρές εἰσι τῆς σοφίας, φαίνομαι οὐδὲν εἰδώς· οὐδὲν γάρ μοι δοκεῖ τῶν αὐτῶν καὶ ὑμῖν, ὡς ἔπος εἰπεῖν. καίτοι τί μεῖζον ἁμαθίας τεκμήριον, ἢ ἐπειδάν τις σοφοῖς ἀνδράσι διαφέρηται ; ἐν δὲ τοῦτο θαυμάσιον ἔχω ἀγαθόν, ὅ με σῴζει· οὐ γάρ αἰσχύνομαι μανθάνων, ἀλλὰ πυνθάνομαι καὶ ἐρωτῶ καὶ χάριν πολλὴν ἔχω τῷ ἀποκρινομένῳ, καὶ οὐδένα πώποτε ἀπεστέρησα χάριτος. οὐ γὰρ πώποτε ἔξαρνος[1] ἐγενόμην μαθών τι, ἐμαυτοῦ ποιούμενος τὸ μάθημα εἶναι ὡς εὕρημα. ἀλλ' ἐγωμαίζω τὸν διδάξαντά με ὡς σοφὸν ὄντα, ἀποφαίνων ἃ ἔμαθον παρ' αὐτοῦ. καὶ δὴ καὶ νῦν ἃ σὺ λέγεις οὐχ ὁμολογῶ σοι, ἀλλὰ διαφέρομαι πάνυ σφόδρα· καὶ τοῦτ' εὖ οἶδα ὅτι δι' ἐμὲ γίγνεται, ὅτι τοιοῦτός εἰμι οἷός πέρ εἰμι, ἵνα μηδὲν ἐμαυτὸν μεῖζον εἴπω.

[1] ἔξαρνος γενέσθαι, to deny.

PLATO, *Hipp. Min.*, 372, A-C.

Translate EITHER (*a*) OR (*b*), but not both :—

(*a*) *Athene rallies Odysseus on his caution.*

Τὸν δ' ἠμείβετ' ἔπειτα θεὰ γλαυκῶπις Ἀθήνη·
"αἰεί τοι τοιοῦτον ἐνὶ στήθεσσι νόημα·
τῷ σε καὶ οὐ δύναμαι προλιπεῖν δύστηνον ἐόντα.
ἀσπασίως γάρ κ' ἄλλος ἀνὴρ ἀλαλημένος ἐλθὼν
ἵετ' ἐνὶ μεγάροις ἰδέειν παῖδάς τ' ἀλοχόν τε·
σοὶ δ' οὔ πω φίλον ἐστὶ δαήμεναι οὐδὲ πυθέσθαι,
πρίν γ' ἔτι σῆς ἀλόχου πειρήσεαι, ἥ τε τοι αὖτως
ἧσται ἐνὶ μεγάροισιν, ὀϊζυραὶ δέ οἱ αἰεὶ
φθίνουσιν νύκτες τε καὶ ἤματα δάκρυ χεούσῃ.
αὐτὰρ ἐγὼ τὸ μὲν οὔ ποτ' ἀπίστεον, ἀλλ' ἐνὶ θυμῷ
ᾔδη, ὅ νοστήσεις ὀλέσας ἄπο πάντας ἑταίρους·
ἀλλά τοι οὐκ ἐθέλησα Ποσειδάωνι μάχεσθαι
πατροκασιγνήτῳ, ὅς τοι κότον ἔνθετο θυμῷ,
χωόμενος ὅτι οἱ υἱὸν φίλον ἐξαλάωσας.
ἀλλ' ἄγε τοι δείξω Ἰθάκης ἕδος, ὄφρα πεποίθῃς.

Odyssey, XIII., 329-344.

(*b*) *Sic vos non vobis.*

ΧΟ. Παύσασθον ἤδη, λῷστα γὰρ μακρῷ τάδε,
λόγων ματαίων, μὴ δύο σφαλῆθ' ἅμα.
ΙΗ. οἴμοι, καθ' Ἑλλάδ' ὡς κακῶς νομίζεται.

ὅταν τροπαῖα πολεμίων στήσῃ στρατός,
οὐ τῶν πονούντων τοὔργον ἡγοῦνται τόδε,
ἀλλ' ὁ στρατηγὸς τὴν δόκησιν ἄρνυται,
ὃς εἷς μετ' ἄλλων μυρίων πάλλων δόρυ
οὐδὲν πλέον δρῶν ἑνὸς ἔχει πλείω λόγον.
σεμνοὶ δ' ἐν ἀρχαῖς ἥμενοι κατὰ πτόλιν
φρονοῦσι δήμου μεῖζον, ὄντες οὐδένες.
οἱ δ' εἰσὶν αὐτῶν μυρίῳ σοφώτεροι,
εἰ τόλμα προσγένοιτο βούλησις θ' ἅμα.
ὡς καὶ σὺ σός τ' ἀδελφὸς ἐξωγκωμένοι
Τροίᾳ κάθησθε τῇ τ' ἐκεῖ στρατηγίᾳ,
μόχθοισιν ἄλλων καὶ πόνοις ἐπηρμένοι.

EURIP., *Andromache*, 691-705.

SECOND PAPER.

WEDNESDAY, 1*st April* 1896.—12 *to* 2 *o'clock.*

I. SENTENCES.

1. You must push on with all your might, if you mean to get home before the sun sets.

2. They asked why Perdiccas had attacked their allies, if he expected their troops in his country to remain quiet.

3. Far from despising the man, I loved him; for with all his faults (and he had many) he did more good to the country than any man I ever knew.

4. At last we resolved to try if we could not make our escape this way, thinking that if we could elude the watch and gain the wall before them, we might reach friendly territory.

5. He swore by Zeus that he would listen to no argument, whatever it might be, from any Mede, until the king came to him in person as a suppliant concerning the injustices he had committed.

II. GRAMMAR.

1. Give the chief parts of ἀποθνήσκω, βλώσκω, ἐσθίω, μιμνήσκω, νέω (swim), πίμπλημι, σπένδω, τίνω, τρέχω, ὠθέω.

2. What is the force of the prepositions in ἀναφέρω, ἀποδί-

δωμι, καθορῶ, μεταπέμπομαι, ὑπολαμβάνω; and of the suffixes in πηλίκος, τουτονί, δεσμωτήριον, Θριῶζε, ἄροτρον?

3. Explain and exemplify the force of the particle ἄν (*a*) with the imperfect indicative, (*b*) with the subjunctive.

4. Turn into Greek: Far be it from me. No sooner said than done. I assure you your fears are groundless. Such is the case, as far as I know. To think of your doing that!

5. Translate and explain the negatives in:—

(*a*) ὅπως μὴ ἐρεῖς τοῦτο μηδενί.

(*b*) οὐκ ἔστιν ἀναχωρεῖν μὴ νικήσαντας.

(*c*) ὅστις μὴ τρέχοι, οὐδ' ἐνίκα.

(*d*) ὅστις οὐ θέλει ἐργάζεσθαι, μηδὲ ἐσθιέτω.

LOWER STANDARD.

SATURDAY, 28*th September* 1895.—3 *to* 6 *o'clock.*

Preparations for the Battle of Delium.

I. Translate:—

Τοιαῦτα ὁ Παγώνδας τοῖς Βοιωτοῖς παραινέσας ἔπεισεν ἰέναι ἐπὶ τοὺς Ἀθηναίους, καὶ κατὰ τάχος ἀναστήσας ἦγε τὸν στρατόν· ἤδη γὰρ καὶ τῆς ἡμέρας ὀψὲ ἦν. ἐς χωρίον δὲ καθίσας ὅθεν, λόφου ὄντος μεταξύ, οὐκ ἐθεώρουν ἀλλήλους, ἔτασσέ τε καὶ παρεσκευάζετο ὡς ἐς μάχην. τῷ δὲ Ἱπποκράτει ὄντι περὶ τὸ Δήλιον ὡς αὐτῷ ἠγγέλθη ὅτι Βοιωτοὶ ἐπέρχονται, πέμπει ἐς τὸ στράτευμα κελεύων ἐς τάξιν καθίστασθαι, καὶ αὐτὸς οὐ πολλῷ ὕστερον ἐπῆλθε, καταλιπὼν ὡς τριακοσίους ἱππέας περὶ τὸ Δήλιον, ὅπως φύλακές τε ἅμα εἶεν εἴ τις ἐπίοι αὐτῷ, καὶ τοῖς Βοωτοῖς καιρὸν φυλάξαντες ἐπιγένοιντο ἐν τῇ μάχῃ. Βοιωτοὶ δὲ πρὸς τούτους ἀντικατέστησαν τοὺς ἀμυνουμένους, καὶ ἐπειδὴ καλῶς αὐτοῖς εἶχεν, ὑπερεφάνησαν τοῦ λόφου, καὶ ἔθεντο τὰ ὅπλα τεταγμένοι ὥσπερ ἔμελλον, ὁπλῖται ἑπτακισχίλιοι μάλιστα καὶ ψιλοὶ ὑπὲρ μυρίους. ἱππῆς δὲ χίλιοι καὶ πελτασταὶ πεντακόσιοι.

Thuc. iv. 93.

Parse, with chief parts:—

ἀναστήσας, ἠγγέλθη, ἐπίοι, ὑπερεφάνησαν, ἔθεντο.

II. GRAMMAR.

1. Give gender, gen. sing., and dat. and acc. plural of: Ἑρμῆς, πλοῦς, γέρας, αἰδώς, θρίξ.

2. Compare μῶρος, γλυκύς, πολύς, χαριέντως, ἄνω.

3. Decline in the plural ἐγώ, σεαυτοῦ, οὗ, ὅδε, ὅστις.

4. Write out the 2nd and 3rd pers. sing. and 3rd pers. pl. of :—

(1) The 1st aor. opt. act. of στέλλω.
(2) The pres. opt. act. of φιλέω.
(3) The 2nd aor. imper. act. of τίθημι.
(4) The pluperfect indic. act. of οἶδα.
(5) The pluperfect indic. pass. of τιτρώσκω.

5. Give the principal parts of : ἀνδάνω, δάκνω, δοκέω, ἐλαύνω, εὑρίσκω, θάπτω, καλέω, κτάομαι, ὄμνυμι, πήγνυμι.

6. Form pres., fut., and perf. act. from these stems : βλαβ-, μαν-, καυ-, λαθ-, λαβ-.

7. Explain the phrases; ἐπ' ἐμοῦ ἐγένετο ; ἀνὰ πέντε τεταγμένοι ἦσαν ; ὑπὸ νύκτα ἀφίκοντο.

What cases are governed by διά, and with what meanings ?

III. Sentences.

1. They used to envy each other.
2. If you had come yesterday (χθές) he would not have died.
3. Themistocles was very clever at cheating (ἀπατᾶν) the Spartans.
4. If any one asks you your name, tell him you have none.
5. Nothing shall prevent our coming.
6. Oh that I were in Athens.

Saturday, 28*th March* 1896.—3 *to* 6 *o'clock.*

I. Translate :—

The true Art of Healing.

Ἔλεγε δ' ὁ Θρᾷξ οὗτος, ὅτι ταῦτα μὲν ἰατροὶ οἱ Ἕλληνες, ἃ νῦν δὴ ἐγὼ ἔλεγον καλῶς λέγοιεν· ἀλλὰ Ζάμολξις, ἔφη, λέγει ὁ ἡμέτερος βασιλεύς, θεὸς ὤν, ὅτι ὥσπερ ὀφθαλμοὺς ἄνευ κεφαλῆς οὐ δεῖ ἐπιχειρεῖν ἰᾶσθαι οὐδὲ κεφαλὴν ἄνευ σώματος, οὕτως οὐδὲ σῶμα ἄνευ ψυχῆς, ἀλλὰ τοῦτο καὶ αἴτιον εἴη τοῦ διαφεύγειν τοὺς παρὰ τοῖς Ἕλλησιν ἰατροὺς τὰ πολλὰ νοσήματα, ὅτι τὸ ὅλον ἀγνοῖεν, οὗ δέοι τὴν ἐπιμέλειαν ποιεῖσθαι, οὗ μὴ καλῶς ἔχοντος

ἀδύνατον εἴη τὸ μέρος εὖ ἔχειν. πάντα γὰρ ἔφη ἐκ τῆς ψυχῆς ὡρμῆσθαι καὶ τὰ κακὰ καὶ τὰ ἀγαθὰ τῷ σώματι καὶ παντὶ τῷ ἀνθρώπῳ, δεῖν οὖν ἐκεῖνο καὶ πρῶτον καὶ μάλιστα θεραπεύειν, εἰ μέλλει καὶ τὰ τῆς κεφαλῆς καὶ τὰ τοῦ ἄλλου σώματος καλως ἔχειν. Διδάσκων οὖν με τὸ φάρμακον, 'Αλλ', ἔφη, τῷ φαρμάκῳ τούτῳ μηδείς σε πειθέτω τὴν αὐτοῦ κεφαλὴν θεραπεύειν, ὃς ἂν μὴ τὴν ψυχὴν πρῶτον παράσχῃ ὑπὸ σοῦ θεραπευθῆναι.

II. Grammar.

1. Parse in the above, giving the chief parts of the verbs and the nom. and gen. sing. of the nouns, and accounting for the *moods* of the verbs and the *cases* of the nouns :— ἀγνοῖεν, πειθέτω, παράσχῃ, Ἕλλησιν, νοσήματα.

2. Give the acc. and voc. sing., and dat. and acc. plur., of :—ἐλπίς, σωτήρ, ἐμαυτοῦ, παιδοτρίβης, ἁπλους, πειθώ, πληγείς, πεποιηκώς.

3. Give the Greek for : Here we are. You are the same as ever. On the twenty-first day. Love one another.

Construct short sentences to show the constructions of ἵνα and ὥστε.

4. Compare σαφής, ταχύς, ῥᾴδιος, εὐδαίμων. Form adverbs from ταχύς, βέλτιστος, γράφω, κατά.

5. Give (1) 2nd sing. 1st Aor. Imper. and Partic. active of σπείρω.

(2) 2nd pers. sing. and plur. of the Pres. and Impf. Indic. passive of πειράω (contracted forms).

(3) 3rd pers. sing. and plur. of the Aor. Indic. active of ἀποδίδωμι.

(4) Perf. Inf. and Partic. active and passive of λείπω.

(5) 2nd pers. sing. of the Plpf. Indic. and of the Imper. Subj. and Opt. of οἶδα.

6. Give principal parts of ἀφίστημι, σινίημι, εὑρίσκω, πάσχω.

7. Compare briefly the use of the article in Greek and in English, (*a*) in the predicate, (*b*) with possessive adjectives.

III. Sentences.

1. We cannot tell what to do.
2. I was intending to come home.

3. After waiting fourteen days, they sailed off with all speed.

4. If our men get here first, all will be well.

5. Soldiers, these men are come, not to help us, but to spy out (κατασκοπεῖν) the land.

6. Cease from evil yourselves, and do not suffer others to be ill-treated.

MATHEMATICS.

INTERMEDIATE AND HIGHER STANDARDS.

FIRST PAPER.

THURSDAY, *3rd October* 1895.—9 *to* 11 *o'clock.*

The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the Syllabus for the Intermediate Standard; but such Candidates will receive credit for any question they may answer.

1. Prove that, if two circles touch either externally or internally, the line joining their centres passes through the point of contact.

The circle A touches the circle B at the point O (A being internal to B). A tangent to A at any point P, meets B in R and S; if OP produced meet B in T, and OS meet A in Q, show that TS is parallel to PQ, and that T is the middle point of SR.

2. Prove that the areas of similar triangles are in the duplicate ratio of their homologous sides.

PQR is a triangle, the angle P being greater than the angle Q. A point S is taken in QR, so that the angle RPS is equal to Q. Prove that $RQ : RS$ is in the duplicate ratio of $RP : RS$.

3. Show that if a straight line be perpendicular to any two non-parallel straight lines in a given plane, it is perpendicular to every straight line in the plane.

AB, BC, CD, DA, are four straight lines forming a quadrilateral which is not in one plane. If $AB = CD$, and $BC = AD$, show that K, the middle point of BD, is equi-

distant from A and C, and that KL is perpendicular to AC (L being the middle point of AC).

4. A grocer buys coffee at 1s. 3d. per lb.; mixes it with 12 per cent. by weight of chicory which costs 6d. per lb.; and sells the mixture at 1s. 8d. per lb. How much per cent. of profit does he gain?

5. Express as a single fraction at its lowest terms:—

$$\frac{x^2+(p-q-1)\,x-p+q}{x^2+(-p+q-1)\,x+p-q}\cdot\frac{x^2+(p+q+1)\,x+p+q}{x^2+(-p-q+1)\,x-p-q}.$$

Simplify $6-4\sqrt{3}+\sqrt{(16-8\sqrt{3})}$; and prove that if $x^2=x+1$, then $x^3=2x+1$.

6. Solve the following equations:—

(i.) $$\frac{x+y}{a-b}+\frac{x-y}{a+b}=\frac{x-y}{a-b}+\frac{x+y}{a+b}=1.$$

(ii.) $$(b-c)\,(x+a)^3+(c-a)\,(x+b)^3+(a-b)\,(x+c)^3=0.$$

Additional marks will be given for the reduction of the value of x in (ii.) to its simplest form.

or, as an alternative to (ii.)—

Solve $\dfrac{3x-4}{x+1}=x^2+2x-\dfrac{7}{x+1}$, and explain why -1 is not a root.

7. A settler bought from the Canadian Pacific Railway a rectangular tract of forest land, three miles long by two miles broad. After the purchase was completed, it was agreed, in order to preserve the amenity of the district, that the settler should reserve from cultivation a strip of uniform breadth all round his property, the Railway Company undertaking to run a fence between this strip and the cultivated land, on the understanding that the value of the land reserved was to be equal to the cost of the fence. Find the breadth of the reserved strip, supposing the cost of a lineal yard of fence to be one hundred times the value of a square yard of land.

8. Define $\sin\theta$ and $\tan\theta$ and express each in terms of the other.

If $5\tan\theta=4$, find the value of $\dfrac{5\sin\theta-3\cos\theta}{\sin\theta+2\cos\theta}$.

Show that $\frac{\sqrt{(1+\sin\theta)}+\sqrt{(1-\sin\theta)}}{\sqrt{(1+\sin\theta)}-\sqrt{(1-\sin\theta)}} = \operatorname{cosec}\theta+\cot\theta$

$$= \frac{1}{\operatorname{cosec}\theta-\cot\theta}.$$

9. ABC is a right-angled triangle, C being the right angle, A the least angle, and $c = AB$; D is the mid-point of AB, and E is the foot of the perpendicular from C upon AB. Show that the area of the triangle CDE is $\frac{c^2}{16}\sin 4A$.

The hypotenuse of a right-angled triangle is 2·1469, and the least angle of the triangle is 32° 14′ 30″. Calculate the length of the perpendicular from the right angle on the hypotenuse; given—

$\log 2{\cdot}1469 = {\cdot}3318118$;
$\log 9{\cdot}6874 = {\cdot}9862072$; diff. 45;
$\log \sin 32^\circ\ 14' = \bar{1}{\cdot}7270273$; diff. 2003;
$\log \cos 32^\circ\ 14' = \bar{1}{\cdot}9273103$; diff. 797.

SECOND PAPER.—12 *to* 1.30 *o'clock.*

1. AB is a straight line bisected at C. D is any other point. State the relation that exists between the distances of D from A and B, and the distances of C from A and D. Prove that this relation holds true when D is outside the line AB.

If CD be a chord of a circle, P any point in the diameter parallel to CD, Q the middle point of the arc CD, prove that $PC^2 + PD^2 = 2PQ^2$.

2. If by a regular polygon, closed or unclosed, be understood a series of equal straight lines each making the same angle with the preceding in the same sense, show that every regular polygon, closed or unclosed, may be inscribed in a certain circle.

A, B, C, D, E are consecutive vertices of a regular octogon, and DM is perpendicular to AE, show that triangles ADM, DEM are similar and $AM : ME = 1 + \frac{1}{\sqrt{2}} : 1 - \frac{1}{\sqrt{2}}$.

3. Find values for c and d so that $x^4+12x^3+8x^2+cx+d$ may be the square of an expression of the form x^2+px+q.

Find the G.C.M. of

$$3x^4+5x^3+6x^2+3x+1, \text{ and } 2x^4-x^3-2x+1.$$

4. When are a, b, c, d said to be *proportional*, and when are they said to be in *continued proportion?*

If a, b, c, d are in continued proportion, calculate b and c in terms of a and d.

If a, b, c, d be in continued proportion, shew that

$$(a+d)(b+c)-(a+b)(c+d)=\frac{b(a^2-b^2)^2}{a^3}.$$

5. Solve the equation

$$\frac{a+1}{(x-1)(x-2)}+\frac{a-1}{(x+1)(x+2)}+\frac{2a+1}{(x-1)(x+2)}+\frac{2a-1}{(x+1)(x-2)}=0.$$

Find all the roots of $x^2+y^2-2xy=4$, $xy^2-x^2y=30$.

6. Assuming the formula for expressing $\sin(A+B)$ and $\cos(A+B)$ in terms of $\sin A$, $\cos A$, $\sin B$, $\cos B$, express $\cos 2A$ and $\tan 2A$ in terms of $\tan A$.

Show that $\dfrac{\cos 2A-\cos 4A+\cos 6A}{\sin 2A-\sin 4A+\sin 6A}=\cot 4A$.

7. Show that in any triangle $\cos A=\dfrac{b^2+c^2-a^2}{2bc}$.

$ABCDE$ is the gable of a house, the form of which is a rectangle $ABDE$, surmounted by an equilateral triangle BCD. P is a point in EA produced. If $AP=a$, and the angles BPA and CPA be α and β respectively, show that

$$AE=2a\frac{\tan\beta-\tan\alpha}{\sqrt{3}-\tan\beta}.$$

FIRST PAPER.

THURSDAY, *2nd April* 1896.—9 *to* 11 *o'clock.*

Candidates on the Higher Standard may obtain FULL marks by doing correctly about two-thirds of the questions in each section of this paper: but the Examiners may reject any

Candidate who does less than one-quarter of the questions in any of the three sections A, B, C of the paper.

The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the syllabus of the Intermediate Standard; but such Candidates will receive credit for any question they may answer.

A.

1. An article purchased at 12 per cent. above cost price is sold by the purchaser for 5s. 3d., giving him a gain of $12\frac{1}{2}$ per cent. What was the cost price?

2. A cubical block of metal 7·8 inches in the edge weighs ·75 lbs. per cubic inch. A hole of square section through the cube perpendicular to a face is to be cut so as to leave 100 lbs. of metal in the block. Find to three places of decimals the length of the side of the hole.

3. If $x=\frac{a^2+b^2}{a+b}$, $y=\frac{a^3+b^3}{a^2+b^2}$, find the value of

$$\frac{(xy-b^2)}{x^2y^2-a^2b^2}\frac{(a^2-xy)}{}.$$

4. Factorise—

(α) $4\ (xy-ab)^2-(x^2+y^2-a^2-b^2)^2$.

(β) x^4-50x^2+49.

5. Solve $\frac{x+7}{x+5}+\frac{x+9}{x+7}=\frac{x+6}{x+4}+\frac{x+10}{x+8}$.

6. Solve $x^2-x+y^2-y=18$, $xy+x+y=19$.

7. Define ratio, and proportion.

If $a:b=c:d$ then $\left(\frac{1}{a}+\frac{1}{d}\right)-\left(\frac{1}{b}+\frac{1}{c}\right)=\frac{(a-b)\ (a-c)}{abc}$

and if $a:b=b:c$,

$$a+b+c:a-b+c=(a+b+c)^2:a^2+b^2+c^2.$$

8. A sum of money is divided into two parts in the ratio of $x:y$. A and B divide between themselves the first part in the ratio of $a:b$ and the second in the ratio of $c:d$. What fraction of the whole does each receive? If they receive equal amounts find the ratio of $x:y$.

Find the condition that ax^2+bx+c and px^2+qx+r shall have a common factor of the form $x+f$.

If $x^2+3x=\alpha$ and $x^2+4x=5$ have a root in common, $\alpha^2-14\alpha+40=0$.

B.

10. To divide a straight line AB internally in C, so that $AB\cdot BC$ shall be equal to the square on AC.

If BA be produced to B', so that $B'A=AB$ prove that $B'C\cdot CB=AB\cdot AC$.

11. To inscribe a circle in a given triangle.

ABC is a triangle with $AB=AC$. Show that the circle which touches AB, AC in B and C respectively, passes through the centre of the circle inscribed in ABC.

12. ABC is a triangle; AD, which bisects A, meets BC in D, show that $BA:AC=BD:DC$. Show also that the same proportion holds when AD bisects the exterior angle at A.

PQR is a segment of a circle on PR as chord. S is any point in PR. Divide the arc PQR into two parts, so that the chords of the parts shall have the same ratio to one another as $PS:SR$.

13. If two straight lines are parallel and one of them is perpendicular to a plane so is the other.

If from a point O outside a plane two straight lines be drawn, one, OP, perpendicular to the plane, and the other, OR, perpendicular to RS a straight line in the plane, show that PR is perpendicular to RS.

C.

14. Verify $\dfrac{2\sin\theta\cos\theta-\cos\theta}{1-\sin\theta+\sin^2\theta-\cos^2\theta}=\cot\theta$.

15. Simplify $\dfrac{(\sin 30^\circ+\cos 30^\circ)(\sin 60^\circ-\cos 60^\circ)}{(\sin 60^\circ+\sin 45^\circ)(\cos 30^\circ-\cos 45^\circ)}$.

16. Find values of θ which satisfy $2\cos^2\theta+3\sin\theta=3$.

17. Show how to find the height of a tower standing on a horizontal plane when the base is inaccessible.

SECOND PAPER.

THURSDAY, *2nd April* 1896.—12 *to* 2 *o'clock.*

Candidates on the Higher Standard may obtain FULL marks by doing correctly about two-thirds of the questions in each section of this paper: but the Examiners may reject any Candidate who does less than one-quarter of the questions in any of the three sections A, B, C of the paper.

The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the syllabus of the Intermediate Standard; but such Candidates will receive credit for any question they may answer.

A.

1. A commodity which cost £39, 18s. per cwt. is retailed at £6, 6s. per stone, there being a waste of 5 per cent. What is the profit per cent.?

2. The inland letter rate is 1d. for the first ounce, ½d. for the second ounce, and ½d. for every succeeding two ounces or fraction of two ounces. Find an expression for the postage on a letter whose weight lies between $(2n-1)$ and $2n$ ounces.

3. Show that, when n is an integer, $a^n - b^n$ is divisible by $a-b$, but that $a^n + b^n$ is not.

Explain why, nevertheless, the numerical value of $a^n + b^n$ is divisible by the numerical value of $a-b$ when $a=3$, $b=1$, $n=4$.

4. Find the Greatest Common Measure of

$$a^2 - 4x^2 + 12x - 9 \text{ and } a^2 + 2a - 4x^2 + 8x - 3.$$

Simplify $\dfrac{\left(1+\dfrac{c}{a+b}+\dfrac{c^2}{(a+b)^2}\right)\left(1-\dfrac{c^2}{(a+b)^2}\right)}{\left(1-\dfrac{c^3}{(a+b)^3}\right)\left(1+\dfrac{c}{a+b}\right)}$

5. Solve the following equations:—

(i.) $\left.\begin{matrix}(3x-4y+2)(x-5y)=0\\ (x-6y+1)(2x-3y+1)=0\end{matrix}\right\}$

(ii.) $\sqrt{3x+4}-\sqrt{x+2}=2.$

(*the positive value to be taken for each of the square roots.*)

Explain why one of the two values that make their appearance in the solution of (ii.) fails to satisfy the equation.

6. A man about to invest in the $2\frac{3}{4}$ per cents. observed that if the price of the stock had been $7\frac{1}{3}$ less, he would have got $\frac{2}{9}$ per cent. more interest for his money. What was the price of the stock?

7. If A is proportional to (varies as) B when C is a constant, and proportional to C when B is a constant, then, when B and C both vary, A is proportional to their product.

The volume of a gas is directly proportional to (varies as) the absolute temperature, and inversely proportional to (varies inversely as) the pressure. A given quantity of a gas when the pressure is 15 and temperature 60 has a volume of 1 cubic foot. What is its volume when the pressure is 20 and the temperature 200?

B.

8. The angle at the centre of a circle is double of the angle at the circumference subtended by the same arc.

Prove that if two circles touch each other externally, and parallel diameters be drawn, the straight lines which join the opposite extremities of these diameters will pass through the point of contact.

9. Prove that if two triangles are equiangular they are also similar.

ABC and DBC are two triangles of different altitudes on the same base; AD is produced to meet the base, produced if necessary, in E; show that

$$AE : DE = \text{triangle } ABC : \text{triangle } DBC.$$

10. In a right-angled triangle, if a perpendicular be drawn from the right angle to the hypotenuse, that perpendicular is a mean proportional between the segments of the hypotenuse.

The diameter of a circle is a mean proportional between the side of the equilateral triangle and the side of the hexagon described about the circle.

11. What is meant by the inclination of a straight line to a plane?

To draw a straight line perpendicular to a plane from a given point out of the plane.

Prove that equal straight lines drawn from a given point out of a plane to the plane are equally inclined to the plane.

C.

12. Define the secant and the cosecant of an angle, and find the relation between them.

Prove $\operatorname{cosec}\alpha(\sec\alpha - 1) - \cot\alpha(1 - \cos\alpha) = \tan\alpha - \sin\alpha$.

13. Prove that in any triangle the sides are proportional to the sines of the opposite angles.

AB is a diameter of a circle; BC, CD two arcs each subtending an angle θ at the circumference. AC cuts the chord BD in G. Show that $\frac{BG}{BA} = \tan\theta$.

14. P and Q are two places 1600 yards apart, and T is a tree visible from each. The angle TPQ is observed to be 33° 25′, and the angle TQP 124° 13′. Find in yards, to 2 decimal places, the distance of the tree from P.

Given $\log 2 = \cdot 3010300$.
$\log 3\cdot 4768 = \cdot 5411797$.
$\log 3\cdot 4769 = \cdot 5411922$.
$L\sin 55^\circ 47' = 9\cdot 9174619$.
$L\operatorname{cosec} 22^\circ 22' = 10\cdot 4196083$.

LOWER STANDARD.

MONDAY, 30*th September* 1895.—2 *to* 5 *o'clock.*

1. Define a fraction, and prove from your definition that $\frac{3}{4}$ of $\frac{2}{7} = \frac{3}{14}$.

Add together $\frac{2\cdot 5}{1200}$ of a sovereign, $\frac{\cdot 011}{\cdot 48}$ of a half-sovereign, $\cdot 9375$ of a shilling, and $\frac{4\cdot 5 + \frac{1}{7} \text{ of } 3\cdot 5}{4\cdot 5 - \frac{1}{7} \text{ of } 3\cdot 5}$ of a penny; and express the sum as a decimal fraction of a guinea.

2. *A* and *B* enter into partnership in a commercial venture, *A* investing therein £5000, and *B* £3000. They agree that at the end of each year they shall draw from the profits 4 per cent. on the amounts they have respectively invested, as interest on capital, that *B* shall receive in addition 20 per cent. of the total profits for acting as manager, and that the remainder of the profits shall then be divided equally between them. If in a certain year *A* received in all £750, what did *B* receive?

3. A field is in the form of a rectangle whose length is double its breadth, and its area is $5\frac{11}{121}$ acres. Find the cost of enclosing the field with a fence which cost 9d. per lineal yard.

4. Resolve $625x^4 - 4y^2(25x - 12y)^2$ into four factors.

Find the remainders on dividing the expressions $x^2 + (l+1)x + (m+2)$ and $x^2 + (l+12)x - 2m$ respectively by $x - 1$. Deduce the numerical values of l and m for which these expressions are both divisible by $x - 1$.

5. Reduce to their simplest forms :—

(i.) $$\frac{2x-y}{x(3x-y} - \frac{3x-4y}{2x(5x-4y} + \frac{2x-3y}{(3x-y)(5x-4y)}.$$

(ii.) $$\frac{\left(\frac{a^2}{c^2} - \frac{c^2}{a^2}\right)\left(\frac{a}{c} + \frac{c}{a} - 1\right)}{a^2c^2\left(\frac{1}{c^3} + \frac{1}{a^3}\right)\left(\frac{1}{c} - \frac{1}{a}\right)}$$

6. Distinguish between an equation and an identity, and give examples.

Define a root of an equation, and prove that an equation of the first degree in x has one, and only one, root.

Solve the equation—

$$\frac{x+a}{2a+b} + \frac{x+b}{a+2b} = 2.$$

7. Solve —

(i.) $$\frac{x}{a^2} + \frac{y}{b^2} = \frac{2(x+y)}{a^2+b^2} = 2(a+b).$$

(ii.) $$\frac{3x-2}{2x-3} + \frac{3-2x}{2-3x} = \frac{10}{3}.$$

8. If the cost of 7 lbs. of coffee be equal to that of 5 lbs. of tea, and if 6 lbs. more of coffee than of tea can be bought for £1, 15s., what is the price per lb. of the tea?

9. If in the triangles ABC and DEF the angles B, C be equal respectively to the angles E, F, and the side AB be equal to the side DE, prove that the triangles are equal in every respect.

The bisector of the angle A in a triangle ABC meets BC in D. Show that if AB be greater than AC, then BD is greater than CD.

10. Prove that the square on the hypotenuse of a right-angled triangle is equal to the sum of the squares on the sides containing the right angle.

Show that in a right-angled triangle twice the sum of the squares on the three medians (the straight lines drawn from the vertices to the middle points of the opposite sides) is equal to three times the square on the hypotenuse.

11. To construct a square equal in area to a given rectangle.

Divide a given straight line into two segments such that the sum of their squares shall be equal to a given area.

12. If a chord AB of a circle be produced to any point C, prove that the rectangle CA, CB is equal to the square on the tangent drawn from C to the circle.

Q is a fixed point in the plane of a circle, A is any point on the circumference of the circle, and AP is the tangent to the circle at the point A. Show that the circle passing through Q and A, and having its centre on the line AP, passes through another point which is fixed whatever be the position of A.

Or as an alternative to the latter part of the question—

PQR and $XQYZ$ are respectively a diameter and a chord of a circle at right angles to each other. PYS and RS are other chords of the circle. Prove that the rectangle $PR \cdot PQ$ is equal to the rectangle $PS \cdot PY$.

LOWER STANDARD.

MONDAY, *30th March* 1896.—*2 to 5 o'clock.*

Candidates may obtain FULL marks by doing correctly about two-thirds of the questions in each section of this paper. But the Examiners may reject a Candidate who does less than one-quarter of the questions in any of the sections A, B, C.

A.

1. (*α*) Prove that a number is divisible by 4 if the last two digits are.

(*β*) 33333 when divided by a certain number less than 1000 leaves a remainder 513. Find the number.

2. Simplify—

$$\frac{5\frac{7}{8} - (2\frac{3}{5} \text{ of } 2\frac{2}{5}) + 18\frac{3}{4} \times \frac{3}{25}}{7\frac{5}{7} \text{ of } \frac{2}{9} + (6\frac{14}{25} \div 3\frac{1}{21})}.$$

3. Find the difference between $\frac{1001}{1365}$ and $\frac{935}{2295}$.

4. A map of a level country is drawn on a scale of 4 miles to an inch. What area, to the nearest acre, is represented by a square portion ·46 of an inch in the side?

5. A man possesses £8700 in the $2\frac{3}{4}$ per cents. What is his nett income therefrom when the income tax is at 6d. per £?

B.

6. Divide $4x^6 - 17x^5 + 6x^7 - 2x^2 + 7x - 4x^4 - 2$ by $2x^5 - 5x^3 + 2x^2 - 3x + 2$.

7. Factorise—

$$a^2 - 3a(2b + 3c) - 4(2b + 3c)^2.$$

$$5x^2 - (7 + 15a)x + 21a.$$

8. If y be the *G.C.M.* of two algebraical expressions A and B, their *L.C.M.* $= A.B \div y$.

If $x + c$ be the *G.C.M.* of $x^2 + px + q$ and $x^2 + rx + s$, their *L.C.M.* is $x^3 + (p + r - c)x^2 + (pr - c^2)x + (p - c)(r - c)c$.

9. Simplify—

$$x^3 - \frac{x^2}{1 + \frac{1 - x}{x + \frac{1}{x}}}$$

10. Solve—

$$\frac{6x-7\frac{1}{3}}{13-2x}+2x+\frac{1+16x}{24}=4\frac{5}{12}-\frac{12\frac{5}{8}-8x}{3}.$$

11. Solve—

$$x+y=2a\ ;\quad (2a-b)x^2+(2a+b)y^2=4a^3.$$

12. Solve— $\dfrac{2}{2x-3}+\dfrac{1}{x-2}=\dfrac{6}{3x+2}$.

13. In ten years A will be twice as old as B was 10 years ago. A is 9 years older than B. Find their ages now.

C.

14. ABC, XYZ are two triangles with $AB=XY$, $BC=YZ$ and angle $B=$ angle Y. Prove that the triangles are equal in every respect.

$ABCD$ is a quadrilateral with $AB=DC$ and angle DAB equal to angle ADC. Prove that the angle ABC is equal to the angle DCB.

15. Show that the straight line joining the mid points of two sides of a triangle is equal to half the base and parallel to it.

The quadrilateral formed by joining the middle points of adjacent sides of a quadrilateral is a parallelogram equal to half the area of the original quadrilateral.

16. If $ABCD$ be four points in a straight line so that $AC=CB$ and AD is less than DB, show that the square on AC diminished by the square on DC is equal to the rectangle contained by AD and DB.

Show by the above proposition that of all rectangles with the same perimeter the square has the greatest area.

17. Define a tangent to a circle.

The straight line drawn at right angles to a diameter of a circle at its extremity does not cut the circle.

If two circles touch externally at P and a common tangent meets them at A and B respectively the angle APB is a right angle.

18. The opposite angles of a quadrilateral inscribed in a circle are together equal to two right angles.

A quadrilateral whose opposite angles are together equal to two right angles can be inscribed in a circle.

ABC is a triangle inscribed in a circle. *DB*, *AE* are chords parallel to the opposite sides of the triangle. Show that *ED* is parallel to the tangent at *C*.

FRENCH.

FIRST PAPER.

TUESDAY, 1*st October* 1895.—3 *to* 4.30 *o'clock.*

Translate into French:—

(*a*) In America we know Roscoe only as the author—in Liverpool he is spoken of as the banker; and I was told of his having been unfortunate in business. I could not pity him as I heard some rich men do. I considered him far above the reach of my pity. Those who live only for the world, and in the world, may be cast down by the frowns of adversity: but a man like Roscoe is not to be overcome by the mutations of fortune. They do but drive him in upon the resources of his own mind, to the superior society of his own thoughts, which the best of men are apt sometimes to neglect, and to roam abroad in search of less worthy associates. The solitude of such a mind is its state of highest enjoyment. It is then visited by those elevated meditations which are the proper aliment of noble souls, and are like manna sent from heaven in the wilderness of this world.

(*b*) He was ordered to take plenty of exercise. He has been a soldier almost all his life. Do you think his word can be relied upon? He had ordered everybody to be ready to start at five o'clock in the morning. You have no more cause to be pleased than we have. You must put on your hat; you should never go out without it.

SECOND PAPER.

THURSDAY, 3*rd October* 1895.—3 *to* 5 *o'clock.*

I. Translate into English:—

(*a*) De ses *Mémoires* M. de Chateaubriand a fait et a dû faire un poème. Noble vie, magnanime destinée, à coup sûr, que celle qui se trouve tout naturellement et comme

forcément amenée à produire l'epopée de son siècle en se racontant elle-même, tant elle a été mêlée à tout, à la nature, aux catastrophes, aux hommes, tant son rôle extérieur a été grand, bien qu'elle ait gardé plus d'un mystère ! Oh ! quand je m'échappe quelquefois à parler du factice inévitable des rôles humains ; quand j'ai l'air de me plaire à la pure realité, ce n'est pas que je me dissimule les misères et les petitesses de celle-ci, ce n'est pas que je méconnaisse le mérite et la force des entreprises. En présence surtout de l'œuvre et de la vie de M. de Chateaubriand, j'ai senti combien il sied à la faculté puissante, au génie, d'enfanter de longues espérances, de se proposer de grands buts, d'épouser d'immenses causes. A trente ans, d'ordinaire, le premier cours naturel de la jeunesse s'affaiblit. A s'en tenir au point de vue de la stricte realité, on sait déjà les inconvénients de toute chose, le néant des amitiés, les revers des enthousiasmes, l'insuffisance des doctrines stoïques et altières. Si l'on demeure à ce point de vue stérile, il n'est aucune raison pour se remuer davantage, et l'on cesse toute action confiante et suivie à l'âge même où le génie déploie la sienne.

SAINTE-BEUVE.

(*b*) Le temps, qui change tout, change aussi nos humeurs ;
Chaque âge a ses plaisirs, son esprit et ses mœurs.
Un jeune homme, toujours bouillant dans ses caprices,
Est prompt à recevoir l'impression des vices,
Est vain dans ses discours, volage dans ses désirs,
Rétif à la censure, et fou dans les plaisirs.
L'âge viril, plus mûr, inspire un air plus sage,
Se pousse auprès des grands, s'intrigue, se ménage,
Contre les coups du sort songe à se maintenir,
Et loin dans le présent regarde l'avenir.
La vieillesse chagrine incessament amasse,
Garde, non pas pour soi, les trésors qu'elle entasse,
Marche en tous ses desseins d'un pas lent et glacé,
Toujours plaint le présent et vante le passé ;
Inhabile aux plaisirs dont la jeunesse abuse,
Blâme en eux les douceurs que l'âge lui refuse.

BOILEAU.

II. Grammar :—

1. Explain in the above prose passage: (*a*) the use of *que* in "que celle qui se trouve"; (*b*) the Subjunctive in "ce n'est pas que je méconnaisse." Mention some conjunctions, besides *bien que* (*bien qu'elle ait gardé*), which always govern the Subjunctive, and others which govern the Subjunctive under certain circumstances. Illustrate these circumstances by a few examples.

2. Distinguish between *savant* and *sachant*; *ailleurs* and *d'ailleurs*; *puis* and *alors* (English *then*); *quitter* and *laisser* (English *leave*). Form sentences to illustrate your answers.

3. State the different ways in which the English preposition *to*, before an Infinitive, can be rendered into French, and translate the following sentences:—He is too old to work. This is difficult to believe. It is difficult to believe him. I hope to see you again to-morrow. I did it to please him.

4. State when the Definite Article is omitted with the names of countries, and when it is used with the names of persons.

III. Philology and Literature :—

(*Only* one *of the following questions to be attempted.*)

1. Explain etymologically the form and meaning of any ten of the following words:—plaisir, beaucoup, mûr, emportement, âge, volage, avenir, chaque, loisir, néant, puissance, blâmer, aucun, aujourd'hui, monsieur.

2. Explain how the Latin *me* has produced the two different French forms *me* and *moi*; why substantives in *-age* are generally of the masculine gender, and why *image*, *cage*, *rage*, &c., form exceptions.

3. Discuss the influence of Boileau on French literature.

4. Give a brief description and criticism of any French novel you have read, and say what you know about the writer and his literary importance.

FIRST PAPER.

TUESDAY, 31*st March* 1896.—3 *to* 4.30 *o'clock.*

Translate into French :—

(*a*) To say the truth, the public never act more wisely than when they act most liberally in the distribution of their rewards; and then the good they receive is often more to be considered than the motive from which they receive it. Example alone is the end of all punishment and rewards. Laws never inflict disgrace in resentment, nor confer honour from gratitude. "For it is very hard, my lord," said a convicted felon at the bar to the late excellent Judge Burnet, "to hang a poor man for stealing a horse." "You are not to be hanged, sir," answered my honoured and beloved friend, "for stealing a horse, but you are to be hanged that horses may not be stolen." In like manner, it might have been said to the late Duke of Marlborough, when Parliament was so deservedly liberal to him after the battle of Blenheim: "You receive not these honours and bounties on account of a victory past, but that other victories may be obtained."—FIELDING.

(*b*) 1. If I had been afraid that he would come, I should have stayed at home.

2. He was asked whether it was true, and he said no.

3. There is nobody but knows him, and knows him to be honest.

4. It is a week since I last spoke to him.

5. I shall do what you please.

6. I do not believe that anybody could say I had deceived him.

7. The few letters which I have made her write are lost.

8. French is perhaps more easily learnt than you may have thought.

SECOND PAPER.

THURSDAY, 2*nd April* 1896.—3 *to* 5 *o'clock.*

I. Read the following and translate into English from *A chaque pas* :—

(*a*) C'était une chambre, ou pour mieux dire un grand cabinet complètement entouré de hautes boiseries du commencement de Louis Quinze, autant du moins que j'en pus juger par leur ensemble ; car les détails de l'ornementation disparaissaient complètement sous un amas de toiles d'araignées couvertes de poussière et tombant en certains endroits comme les lambeaux d'un drapeau mutilé. A chaque pas que je faisais, le plancher semblait vouloir s'effondrer. La chambre était d'ailleurs dans un état prodigieux de désordre et de dévastation. Non seulement les souris et les rats avaient rongé les couvertures du lit, éventré les matelas, dévasté les coussins, mais les chouettes, se frayant un passage entre les planches qui bouchaient la fenêtre, avaient élu domicile dans cette chambre abandonnée. Tout cela faisait peine à voir. Quelques fragments de rideaux pendaient encore le long du mur et autour du mur, tandis que d'autres loques (*rags*) se confondaient avec les ordures qui recouvraient le plancher d'une couche épaisse et grisâtre. Deux chaises d'une forme charmante et recouvertes de tapisseries des Gobelins gisaient à terre, renversées, à moitié brisées ; les tiroirs d'une jolie commode à cuivres finement ciselés étaient restés ouverts. Dans une de ces petites toilettes Louis Quinze, dont le dessus s'ouvre en trois parties, on voyait les peignes et les brosses, la boite à poudre, des ciseaux à ongles déformés par la rouille, deux petits étuis encore pleins de longues épingles, à terre, auprès de la toilette, les fragments d'un admirable pot à l'eau en vieux saxe.—C'était la confusion qui suit un départ précipité.—Droz.

(*b*) Lorsque le laboureur, regagnant sa chaumière,
Trouve le soir son champ rasé par le tonnerre,
Il croit d'abord qu'un rêve a fasciné ses yeux,
Et, doutant de lui-même, interroge les cieux.
Partout la nuit est sombre, et la terre enflammée.
Il cherche autour de lui la place accoutumée
Où sa femme l'attend sur le seuil entr'ouvert ;
Il voit un peu de cendre au milieu d'un désert.

Ses enfants demi-nus sortent de la bruyère,
Et viennent lui conter comme leur pauvre mère
Est morte sous le chaume avec des cris affreux :
Mais maintenant au loin tout est silencieux.
Le misérable écoute et comprend sa ruine.
Il serre, désolé, ses fils sur sa poitrine ;
Il ne lui reste plus, s'il ne tend pas la main,
Que la faim pour ce soir et la mort pour demain.
Pas un sanglot ne sort de sa gorge oppressée :
Muet et chancelant, sans force et sans pensée,
Il s'asseoit à l'écart, les yeux sur l'horizon ;
Et, regardant s'enfuir sa moisson consumée
Dans les noirs tourbillons de l'épaisse fumée,
L'ivresse du malheur emporte sa raison.

A. DE MUSSET.

II. GRAMMAR.

1. Translate any *four* of the following :—

(*a*) Whom have we lost?—The friend whom we have lost.

(*b*) What do we lose?—What we lose is nothing.

(*c*) Of whom did they speak?—The ladies of whom they had spoken.

(*d*) Whose letter is this?—The girl whose letter you have read.

(*e*) Which is your brother?—He does not believe it, which is strange.

2. Translate any *four* of either *a* or *b*.

(*a*) He arrived before his sister. We stood before the king. I knew him before. I knew it before(hand). Don't go before he comes back.

(*b*) Some day, any day, any two days, either day, neither day.

3. Translate any *four* of the following :—He came, (*a*) after having seen me ; (*b*) after my having seen him ; (*c*) after he had seen me ; (*d*) after I had seen him ; (*e*) in order to see ; (*f*) in order that he might see me ; (*g*) in order that I might see him.

4. Account for the agreement or non-agreement of the

past participles in the following phrases:—(*a*) Ils se sont blessé les doigts; (*b*) ils se sont blessés à la tête; (*c*) les larmes qu'ils nous ont vus verser; (*d*) les paroles que je lui ai entendu dire; (*e*) les chansons que j'ai entendu chanter; (*f*) les dames que j'ai entendues chanter; (*g*) les livres que nous avions commencé à lire; (*h*) des actions que je les ai entendus louer.

5. Translate any *four* of the following, using French verbs for English adverbs:—We had just dined. I would rather die. You must first read it. He will see it at last. She almost fell. She was about to sing.

III. Philology and Literature.

(*Only* one *question to be attempted.*)

1. Give French verbs formed from, or containing the root of, any *ten* of the following: bras, beau, nu, néant, prix, court, noir, franc, lent, tu, peau, sang, rang, cher, haut.

2. Give substantives corresponding to any *ten* of the following; frais, médire, niais, peser, sot, seul, sale, amer, ouvert, méchant, cruel, faillir, oublier, guérir, louer.

3. Give adjectives corresponding to any *ten* of the following: peur, mois, printemps, terre, ciel, pluie, monde, orateur, université, pudeur, tête, nuit, jour, seigneur, diner.

4. Give the etymology of any *ten* of the following: bonheur, hélas, coup, charme, aussi, encore, dame, mais, rien, dimanche, semaine, droit, meunier, monsieur, après-midi.

5. Compare Corneille and Racine as dramatists.

6. Say wherein lies the excellence of La Fontaine's fables, and comment upon any one of them that you may remember.

GERMAN.

FIRST PAPER.

Wednesday, *2nd October* 1895. 3 *to* 4.30 *o'clock.*

Translate into German:—

(*a*) His horse was a splendid swimmer and able to stand a great deal of work. He would try to save some of the

poor sailors. So he seated himself firmly in the saddle and rode into the water. The crowd looked on breathlessly. Horse and rider seemed swallowed up for a moment by the terrible waves, but at last the horse was seen striking out boldly. They reached the wreck, and the old man came back to shore with a man holding on to each of his feet, the noble horse pulling them along gallantly. Seven times back and forward they went, and so brought fourteen men safely ashore. But the eighth time the old man was swept from the horse's back by a gigantic wave. The horse managed to swim ashore, but his brave master was never seen again.

(*b*) He was at last thought out of danger. This is not the volume I wanted you to bring me. Not having found him, I went there the next day. He could hardly believe his eyes when he saw him in such a condition. He told his children that they must talk only when they were spoken to. He was greatly amused at being asked such questions.

SECOND PAPER.

FRIDAY, *4th October* 1895.—9 *to* 11 *o'clock.*

I.

Translate into English :—

(*a*) So waren ſie nach und nach auf einen freien Platz gelangt, der zur Vorſtadt hinführte, wo am Ende vieler kleiner Buden ein größeres Bretergebäude in die Augen fiel, das ſie kaum erblickten, als ein ohrzerreißendes Gebrüll ihnen entgegen tönte. Die Fütterungsſtunde der dort zur Schau ſtehenden wilden Tiere ſchien herangekommen; der Löwe ließ ſeine Wald- und Wüſtenſtimme auf's Kräftigſte hören, die Pferde ſchauderten und man konnte der Bemerkung nicht entgehen, wie in dem friedlichen Weſen und Wirken der gebildeten Welt der König der Einöde ſich ſo furchtbar verkündige. Zur Bude näher gelangt, durften ſie die bunten koloſſalen Gemälde nicht überſehen, die mit heftigen Farben und kräftigen Bildern jene fremden Tiere darſtellten, welche der friedliche Staatsbürger zu ſchauen unüberwindliche Luſt empfinden ſollte. Der grimmig ungeheure Tiger ſprang auf einen Mohren los, im Begriff, ihn zu zerreißen; ein Löwe ſtand ernſthaft majeſtätiſch, als wenn er keine Beute ſeiner würdig vor ſich ſehe; andere wunderliche bunte Geſchöpfe verdienten neben dieſen mächtigen weniger Aufmerkſamkeit.

„Es ist wunderbar," sagte der Fürst, „daß der Mensch durch Schreckliches immer aufgeregt sein will. Drinnen liegt der Tiger ganz ruhig in seinem Kerker, und hier muß er grimmig auf einen Mehren losfahren, damit man glaube dergleichen inwendig ebenfalls zu sehen. Die guten Menschen wollen eingeschüchtert sein, um hinterdrein erst recht zu fühlen, wie schön und löblich es sei, frei Athem zu holen." Goethe.

(*b*) Die Führer des Lebens.

Zweierlei Genien sind's, die dich durch's Leben geleiten.
Wohl dir, wenn sie vereint helfend zur Seite dir stehn!
Mit erheiterndem Spiel verkürzt dir der eine die Reise,
Leichter an seinem Arm werden dir Schicksal und Pflicht.
Unter Scherz und Gespräch begleitet er bis an die Kluft dich,
Wo an der Ewigkeit Meer schaudernd der Sterbliche steht.
Hier empfängt dich entschlossen und ernst und schweigend der andere,
Trägt mit gigantischem Arm über die Tiefe dich hin.
Nimmer widme dich einem allein! Vertraue dem ersten
Deine Würde nicht an, nimmer dem andern dein Glück!
Schiller.

II. Grammar.

1. When is *of* rendered in German by the genitive case? When is it omitted, and when is it rendered by von? Give examples.

2. Explain the difference between sich and selbst, and between wer and welcher. Give instances.

3. How can you ascertain the gender of German nouns (*a*) by their endings, (*b*) by their meaning?

4. What influence is exercised on the order of words in German by the following words: weil, sondern, bis, freilich? Form one sentence for each case.

5. Give the meaning and the past participle of the following words widerstehen, übergehen, unterhalten, beauftragen. Mark carefully those verbs which admit of two different meanings and two different formations of their past participles.

III. Philology and Literature.

(*Only* one *of the following questions to be attempted.*)

1. Give the derivation and meaning of: Gesicht, Herzog, höflich, Mädchen, Gedächtnis, Mitgift, Erinnerung, eigensinnig, Gunst, wichtig.

2. Explain fully how in the course of the development of the German language Sie—originally the third person plural—came to be used instead of Du and Ihr.

3. Contrast the literary genius of Schiller and Goethe, and describe what you have read of either of them.

4. Say what you know of the influence exercised by the literature of France on that of Germany until the end of the eighteenth century.

FIRST PAPER.

WEDNESDAY, 1*st April* 1896.—3 *to* 4.30 *o'clock.*

Translate into German:—

(*a*) Having passed the greater part of the morning in hearing the Knight's reflections (remarks), which were partly private and partly political, he asked me if I would smoke a pipe with him over (bei) a dish of coffee at Squire's. As I love the old man, I take delight in complying with everything that is agreeable to him, and accordingly waited on (accompanied) him to the coffee-house, where his venerable figure (ehrwürdige Gestalt) drew upon us the eyes of the whole room. He had no sooner seated himself at the upper end of the high table, but he called for a clean pipe, a paper (Päckchen, n.) of tobacco, a dish of coffee, a wax candle, and the Supplement (Abendblatt, n.) with such an air of cheerfulness and good-humour, that all the boys in the coffee-room, who seemed to take pleasure in serving him, were at once employed on his several errands (Auftrag, m.), insomuch that nobody else could come at a dish of tea, till the Knight had got all his conveniences (all he required) about him.—ADDISON.

(*b*) 1. He could not have said so. 2. I told him that he ought to have asked me. 3. He is said to have been quite wrong. 4. They were told to be quiet. 5. We insisted on his leaving the house at once. 6. You must go there before—before next week—before he comes back. 7. I should like you to read the letter first. 8. Why did you not have your hair cut?

SECOND PAPER.

FRIDAY, *3rd April* 1896.—9 *to* 11 *o'clock.*

I. Translate into English:—

(*a*) Ich weiß nicht, ob täuschende Geister um diese Gegend schweben, oder ob die warme himmlische Phantasie in meinem Herzen ist, die mir alles rings umher so paradiesisch macht. Da ist gleich vor dem Orte ein Brunnen, ein Brunnen, an den ich gebannt bin, wie Melusine mit ihren Schwestern.- Du gehst einen kleinen Hügel hinunter und findest dich vor einem Gewelbe, da wohl zwanzig Stufen hinabgehen, wo unten das klarste Wasser aus Marmorfelsen quillt. Die kleine Mauer, die eben umher die Einfassung macht, die hohen Bäume, die den Platz rings umher bedecken, die Kühle des Ortes, das hat alles so was Anzügliches, was Schauerliches. Es vergeht kein Tag, daß ich nicht eine Stunde da sitze. Da kommen dann die Mädchen aus der Stadt und holen Wasser, das harmloseste Geschäft und das nötigste, das ehemals die Töchter der Könige selbst verrichteten. Wenn ich da sitze, so lebt die patriarchalische Welt so lebhaft um mich, wie sie alle, die Altväter, am Brunnen Bekanntschaft machen und freien, und wie um die Brunnen und Quellen wohlthätige Geister schweben. O, der muß nie nach einer schweren Sommertagswanderung sich an des Brunnens Kühle gelabt haben, der das nicht mitempfinden kann.

—Goethe.

(*b*) Sehnsucht.

Es schienen so golden die Sterne,
Am Fenster ich einsam stand,
Und hörte aus weiter Ferne
Ein Posthorn im stillen Land.
Das Herz mir im Leib entbrennte,
Da hab' ich mir heimlich gedacht:
Ach, wer da mitreisen könnte
In der prächtigen Sommernacht!

Zwei junge Gesellen gingen
Vorüber am Bergeshang,
Ich hörte im Wandern sie singen
Die stille Gegend entlang:
Von schwindelnden Felsenschlüften,
Wo die Wälder rauschen so sacht,
Von Quellen, die von den Klüften
Sich stürzen in Waldesnacht.

Sie sangen von Marmorbildern,
Von Gärten, die über'm Gestein
In dämmernden Lauben verwildern,
Palästen im Mondenschein,

Wo die Mädchen am Fenſter lauſchen,
Wann der Lauten Klang erwacht,
Und die Brunnen verſchlafen rauſchen
In der prächtigen Sommernacht.

—Eichendorff.

II. GRAMMAR :—

(*Answer any* FIVE *of the following questions.*)

1. Give the genitive singular and the nominative plural, adding the definite article and the English meaning, of any *eight* of the following: Joch, Duft, Geck, Scheune, Unterthan, Hauſe, Eimer, Korn, Herd, Ort, Anwalt, Gewalt.

2. Point out how the double meaning of any *four* of the following affects their gender or declension: Thor, Zoll, Steuer, Bauer, Leiter, Heide.

3. Give comparative and superlative of any *four* of the following: bald, gern, ſtolz, laut, beshaft, wohl.

4. Mention *four* co-ordinative conjunctions (*two* of which should be adverbial) and *two* subordinative conjunctions. Form short sentences to illustrate their syntax.

5. Form short sentences to illustrate the meaning of, and the construction (case, or preposition and case) required by, any *four* of the following adjectives: ſchuldig, überlegen, eitel, befreundet, begierig, wert.

6. Form short sentences to illustrate the meaning of, and the construction (case, or preposition and case) required by, any *four* of the following verbs: entſagen, folgen, ſich bedienen, ſich vertragen, würfeln, würdigen.

III PHILOLOGY AND LITERATURE :—

(*Only* ONE *of the following questions to be attempted.*)

1. (*a*) From which verbs are formed: Tracht, Kunſt, Stunde, Zügel, Geſchichte?

(*b*) Form substantives from: mögen, reißen, wachſen, triefen, kommen.

2. (*a*) Give the English etymological equivalents of *five* of the following: Rücken, nicht, Magen, manch, Roggen, Schaden, tell, traurig.

(*b*) Give the German etymological equivalents of *five* of

the following: *clean, cheap, beam, edge, weak, midge, slight, sore.*

3. Characterise briefly Lessing's position in German Literature; say in which departments he distinguished himself, and describe, if you can, any one of his dramatic characters.

4. Mention some of the principal works of Klopstock, Wieland, and Herder, and say in how far these authors represent foreign influences on German Literature.

DYNAMICS.

FRIDAY, 4*th October* 1895.—1 *to* 4 *o'clock.*

[Take $g=32$ foot-second units.]

1. State and prove the proposition known as the "Triangle of Velocities."

A, *B*, *C*, *D* are four given points. Give a geometrical construction for the point *P* such that the resultant of the four velocities represented by *PA*, *PB*, *PC*, *PD* shall be zero.

2. Distinguish between *mass* and *weight.*

Show clearly how it has been established by experiment that at a given place on the earth's surface the weights of different bodies are proportional to their masses.

A cage, containing a mass of 100 lbs., is being raised vertically from the bottom of a mine, and ascends the first 100 feet in 35 seconds with uniform acceleration. What pressure will be exerted between the cage and the mass it contains?

3. A force of *P* poundals acts on a mass of *m* lbs., which is initially at rest, and moves it through a space of *s* feet. What is then the momentum of the mass, and what its kinetic energy? State clearly in what units your results are expressed.

A force equal to the weight of 3 tons acts for $\frac{1}{16}$ of a second on a mass initially at rest. If the momentum thus generated were communicated to a stationary mass of 1 cwt., with what velocity would this mass begin to move?

4. Show by the principle of Conservation of Energy, or

otherwise, that the greatest height that can be reached by a body projected with a velocity v in a direction making an angle i with the horizon is

$$\frac{v^2 \sin^2 i}{2g}$$

A mass of 10 lbs. is placed on a smooth plane inclined to the horizon at an angle of 30°, and is connected by a string passing over a smooth weightless pulley at the top of the plane with a mass of 8 lbs. which hangs vertically. If the system start from rest, find the velocity of either mass when the smaller mass has fallen through a distance of 24 feet.

5. Apply the Second Law of Motion to deduce the "Parallelogram of Forces" from the "Parallelogram of Velocities."

A uniform sphere, weight W, is placed on a smooth plane inclined to the horizon at an angle i, and is supported by a horizontal string attached to a point on its surface. Show in a diagram the forces which keep the sphere at rest, and prove that the tension of the string is $W \tan i$.

6. Show that a system of forces acting on a rigid body in one plane can in general be reduced to a single force and a couple.

Deduce the conditions of equilibrium.

A uniform ladder is placed in a plane perpendicular to a rough vertical wall with its upper end in contact with the wall, and the lower end on a rough horizontal plane. Being given that the wall and the horizontal plane are equally rough, and that the ladder cannot rest inclined to the vertical at a greater angle than 45°, find the coefficient of friction between the ladder and the wall or horizontal plane.

7. Show how to find the centre of gravity of a body made up of two parts whose masses and centres of gravity are given.

A piece of paper, uniform in thickness and material, is in the form of a square $ABCD$; O is the centre of the square, and E, F are the mid-points of the sides AB, AD respectively. The paper is folded across the line EF so that the

point A coincides with the point O. Find the centre of gravity of the paper when so folded.

8. Distinguish between the total pressure and the resultant pressure of a liquid on a curved surface.

Give (without proof) the formula for the total pressure on any plane surface exposed to the pressure of a liquid.

A cube, whose volume is 1000 cubic centimetres and weight 800 grammes, floats in water with four of its edges vertical. Find the pressure on the horizontal face of the cube which is in contact with the water, and the pressure on each of the vertical faces.

What is the resultant pressure of the water on the cube?

9. State clearly what experiments you would make in order to determine the specific gravity of a solid less dense than water, *e.g.*, a piece of cork; and construct a formula by which you would calculate the specific gravity of the solid from the results of the experiments.

A solid weighs a grammes in water and b grammes in a liquid of specific gravity s. Find the mass of the solid in grammes and its volume in cubic centimetres.

10. State Boyle's Law, and show how it is verified by experiment in the case of common air for pressures greater than atmospheric pressure. Why is it necessary to proceed slowly in carrying out the experiment?

A hollow cylinder, 10 feet high, is closed at one end but open at the other. It is held with its axis vertical and open end downwards, and is then lowered into water until the lower end is 29 feet below the surface of the water, when half the quantity of air in it is allowed to escape. Assuming that the height of the water barometer is 33 feet, find to what height the water will rise inside the cylinder.

FRIDAY, *3rd April* 1896.—1 *to* 4 *o'clock.*

Candidates may obtain FULL marks by doing correctly about two-thirds of the questions set.

1. If two straight lines AB, CD represent in magnitude and direction the velocity of a moving point at two different instants, give a geometrical construction for finding a line

to represent in magnitude and direction the change of velocity from the former instant to the latter.

At the beginning of an interval a point is moving with a velocity of 10 yards per minute, and during the interval its change of velocity is a uniform velocity of 10 yards per minute in a direction which makes an angle of 60° with the direction of its initial motion. Find in magnitude and direction the final velocity of the point.

2. Define Momentum, and contrast it with Kinetic Energy.

State Newton's First Law of Motion.

A body initially at rest whose mass is 10 is acted on by a force which produces in it an acceleration of 9 feet per second. What is the momentum of the body at the end of one minute after its velocity was 3 feet per second?

3. A point has an initial velocity V, and receives uniform acceleration g in a direction opposite to the direction of motion. Show that if v be the velocity after t seconds, and s the space passed over in that time,

$$v = V - gt$$
$$s = Vt - \tfrac{1}{2}gt^2$$

A body initially at rest whose mass is 1 lb. is acted on for 8 seconds by a force equal to the weight of two ounces. Find (1) the velocity generated, and (2) the space through which the body is moved in the time in question.

4. If f and F are the measures of the same acceleration when the unit of time and unit of length are t seconds, l feet, and T seconds, L feet respectively, find the relation between f and F.

Find the numerical value of g, the acceleration due to gravity, when an hour and a mile are the units.

What approximately must be the unit of length in order that the numerical value of the acceleration due to gravity may be 100 when the unit of time is 10 seconds?

5. Two non-elastic spheres of masses m and m' approach each other in a straight line with velocities v and v' respectively. Find the velocity of the system after impact.

A non-elastic sphere, A, of mass 5 and velocity 6 directly impinges on another, B, of mass 3, and the subsequent velocity of the system is 3 in the direction of A's original motion. Find the velocity of B before impact.

6. Prove the formula for a body ascending vertically under gravity $v^2 = w^2 - 2gh$, explaining what the symbols mean.

A body projected vertically upwards reaches a height h in a certain time, and its greatest height in T seconds afterwards. If its motion were reversed when at the height h it would reach the ground in T seconds. Prove that $h = \frac{3}{8}gT^2$.

7. What is meant by the moment of a force about a point?

The algebraic sum of the moments of two forces meeting in a point, about any point in the line of action of the resultant is zero.

A square frame $ABCD$ is free to turn in its own plane about a point in AD. If forces of 1, 2, 3, 4 units respectively, act along AB, BC, DC, AD, where must the point be that there may be no tendency to rotation?

8. State the Third Law of Motion, and explain it with reference to 1° a statical question and 2° a kinetical one.

Two scale pans each weighing 3 oz. are suspended by a weightless string over a smooth pulley. A mass of 12 oz. is placed in the one pan and 6 oz. in the other. Find the velocity after one second, the tension on the string, and the pressure on the scale pans.

9. Describe the common balance, stating some of the requisites of a good balance, and how each is secured.

Show how the true weight of a body may be found with a balance in which the arms are unequal?

The beam of an untrue balance is 37 inches long, and the apparent weights of an article when placed in the two scales are 16 lbs. and 14 lbs. 1 oz. Find the true weight, and the lengths of the arms.

10. Describe the machine known as the Wheel and Axle, and find the condition of equilibrium on it.

A capstan 2 feet in diameter is worked by means of 8 spokes, each projecting 7 feet from the capstan. Three sailors are at each spoke, one at the end, the other two at distances of 1 foot and 2 feet respectively from the end. Each man exerts a pressure of 40 lbs. What is the heaviest anchor they can support in air (neglecting the friction on the cable)?

11. Find the relation between the power and the weight in a system of weightless pulleys, in which each pulley hangs in the loop of a separate string, one end of which is attached to a separate beam, all the strings being parallel.

If there be three pulleys arranged as above, each weighing 1 lb., find the tensions in the different strings, when the weight supported is 17 lb.

12. To find the position of the centre of gravity of a plane triangle.

If a straight line be drawn parallel to one of the sides of a triangle so as to cut off one-fourth of its area, find the centre of gravity of the quadrilateral remaining.

13. Define a *fluid*. Show that the pressure at any point within a heavy incompressible fluid, not exposed to external pressure, is proportional to the depth of that point below the surface of the fluid.

Two holes are bored in the flat cover of a vessel full of water. Into the one whose area is b square inches there is fitted a smooth piston weighing c pounds. Into the other is fitted a vertical tube, and water is poured into it. How high must the water be made to ascend in the tube that the piston may be driven out; a cubic foot of water weighing 1000 oz.?

14. If a body of uniform density floats in a fluid, the volume of the part immersed is to the volume of the whole body as the specific gravity of the body is to the specific gravity of the fluid.

A piece of cork weighing 2 oz. and of specific gravity ·25 is fastened by a string to the bottom of a vessel full of water so that the cork is wholly immersed. Find the tension of the string.

15. If the capacities of the receiver and the barrel of an air pump, where there is no untraversed space, be respectively x and y, investigate the formula for the density of the air in the receiver after the nth ascent of the piston.

What determines the limit of exhaustion in such an air pump?

If the tube of a barometer extend 36 inches above the mercury in the basin, and on account of the presence of air above the mercurial column, the instrument stands at 27 inches when a correct instrument stands at 30 inches, what length of tube would the air fill if subjected to atmospheric pressure?

Additional Examination Papers for First Year Open Bursaries.

October 1895.

ENGLISH.

FRIDAY, *27th September* 1895.—9 *to* 12 *o'clock.*

1. Discuss, within the limit of three pages, and with strict attention to style, *either* of these subjects:—

Literary Popularity.

Popular Poetry as a Test of National Character.

2. Have any passages in Chaucer appeared to you to be modern in spirit?

Or,

How does Spenser appeal to the modern lover of poetry?

3. What do you know of the early forms of the English Drama?

Can you suggest any reasons for the decay of the Drama in the Eighteenth Century?

4. At what times and in what ways was there a marked development in the study of (1) Shakespeare, *or* (2) The Ballads?

5. Give as full an account as you can of the writings of *one* of the following :—Jonson ; Dryden ; Swift ; Tennyson.

6. To whom, and by whom, have the following epithets been applied :— *Well of English undefiled* ; *Sweet Swan of Avon* ; *The Great Secretary of Nature* ; *God-gifted organ-voice of England ?*

Who are *The Poet's Poet, Glorious John, Namby Pamby*, and *Rantin Rovin Robin ?*

Or,

Can you name any poems or passages describing any *four* of the following subjects :—Music ; King Arthur ; Liberty ; Naval Prowess ; London ; Morning ; The Fireside ? Describe briefly any one of the poems or passages selected.

7. Explain the prosodic forms *Blank Verse*, *Heroic Couplet*, and *Iambic Tetrameter*, referring to any poems which you have read. Can you name any poems of the Eighteenth Century written in Blank Verse ?

8. What were the literary dialects of the seventh, tenth, and fourteenth centuries ? Summarise the causes which defined the ultimate standard speech.

9. Transcribe in modern English *either* of the following passages.

[*When phrases are rendered freely, Candidates are requested to add footnotes explaining the literal interpretation.*]

(*a*) Ða ongann seo abbudysse clyppan and lufian þa Godes gyfe in þæm menn, and heo hine þa monode and lærde, þæt he weoroldhad forlete, and munuchade onfenge ; and he þæt wel þafode ; and heo hine in þæt mynster onfeng mid his godum, and hine geþeodde to gesomnunge þara Godes þeowa, and het hine læran þæt getæl þæs halgan stæres and spelles ; and he eall þa he in gehernesse geleornian mihte, mid hine gemyngade, and swa swa clæne neten eodorcende in þæt sweteste leoð gehwyrfde, and his song and his leoð wæron swa wynsum to gehyrenne ðæt þa sylfan his lareowas æt his muðe writon and leornodon.

Or,

(*b*) Þa wes Vortigernes hired:
for hehne ihalden.
Bruttes weoren særi:
for swulchere isihðe.
Nes hit nawiht longe:
þat ne comen to þan kinge.
cnihtes sunen uiue:
þa ifaren hafden biliue.
heo sæiden to þan kinge:
neowe tiðenden.
Nu forð-rihtes:
icumen beoth þa Peohtes (*Picts*).
þurh þi loud heo ærneð:
& hærȝied & berneð.
& al þene norð ænde:
iuæld to þan grunde.
her-of þu most ræden:
oðer alle we beoð dæden.

[Note.—*The punctuation of the above extract is metrical.*]

LATIN.

Saturday, 5*th October* 1895.—9 *to* 10.30 *o'clock.*

1. Translate into Latin :—

There can be no more erroneous opinion than that of those who believe that the desire of overturning the monarchy produced the civil war, rather than that the civil war brought on the former. In a peaceful and ancient kingdom like England the thought of change could not spontaneously arise. A very few speculative men, by the study of antiquity, or by observation of the prosperity of Venice and Holland, might be led to an abstract preference of republican politics; but at the meeting of this Parliament we have not the slightest cause to suppose that any party, or any number of persons among its members, had formed what must then have appeared so extravagant a conception.

Hallam: *History of England.*

2. Translate into English :—

Nimium ipse est durus praeter aequomque et bonum :
et errat longe mea quidem sententia,
qui imperium credat gravius esse aut stabilius
vi quod fit quam illud quod amicitia adiungitur.
mea sic est ratio et sic animum induco meum :
malo coactus qui suom officium facit,
dum id rescitum iri credit, tantisper pavet :
si sperat fore clam, rursum ad ingenium redit.
ille quem beneficio adiungas ex animo facit,
studet par referre, praesens absensque idem erit.
hoc patrium est, potius consuefacere filium
sua sponte recte facere quam alieno metu :
hoc pater et dominus interest : hoc qui nequit,
fateatur nescire imperare liberis.
sed estne hic ipsus, de quo agebam? et certe is est.
nescio quid tristem video : credo iam, ut solet,
iurgabit. salvum te advenire, Demea,
gaudemus.

TERENCE : *Adelphi.*

GREEK.

SATURDAY, 5*th October* 1895.—10.30 *to* 12 *o'clock.*

I. Translate :—

ΑΘ. *ὑμῖν μὲν γάρ, εἴπερ καὶ μετρίως κατεσκεύασται τὰ τῶν νόμων, εἰς τοῦτ' ἂν καλλίστων ἂν εἴη νόμων μὴ ζητεῖν τῶν νέων μηδένα ἐᾷν, ποῖα καλῶς αὐτῶν ἢ μὴ καλῶς ἔχει, μιᾷ δὲ φωνῇ καὶ ἐξ ἑνὸς στόματος πάντας συμφωνεῖν, ὡς πάντα καλῶς κεῖται θέντων θεῶν.*

ΚΛ. *ὀρθότατά γε, ὦ ξένε, λέγεις, καὶ καθάπερ μάντις ἀπὼν τῆς τότε διανοίας τοῦ τιθέντος αὐτὰ νῦν ἐπιεικῶς μοι δοκεῖς ἐστοχάσθαι καὶ σφόδρα ἀληθῆ λέγειν.*

ΑΘ. *οὐκοῦν ἡμῖν τὰ νῦν ἐρημία μὲν νέων, αὐτοὶ δ' ἕνεκα γήρως ἀφείμεθ' ὑπὸ τοῦ νομοθέτου διαλεγόμενοι περὶ αὐτῶν τούτων μόνοι πρὸς μόνους μηδὲν ἂν πλημμελεῖν ;*

ΚΛ. *ἔστι ταῦτα οὕτως, εἰς ἃ καὶ μηδέν γε ἀνῆς ἐπιτιμῶν τοῖς νόμοις ἡμῶν· οὐ γὰρ τό γε γνῶναί τι τῶν μὴ καλῶν ἄτιμον, ἀλλὰ ἔασιν ἐξ αὐτου συμβαίνει γίγνεσθαι τῷ μὴ φθόνῳ τὰ λεγόμενα ἀλλ' εὐνοίᾳ δεχομένῳ.*

ΛΟ. καλῶς· οὐ μὴν ἐπιτιμῶν γε ἐρῶ τοῖς νόμοις πω, πρὶν βεβαίως εἰς δύναμιν διασκέψασθαι, μᾶλλον δὲ ἀπορῶν. ὑμῖν γὰρ ὁ νομοθέτης μόνοις Ἑλλήνων καὶ βαρβάρων, ὧν ἡμεῖς πυνθανόμεθα, τῶν μεγίστων ἡδονῶν καὶ παιδιῶν ἐπέταξεν ἀπέχεσθαι καὶ μὴ γεύεσθαι, τὸ δὲ τῶν λυπῶν καὶ φόβων, ὅπερ ἄρτι διεληλύθαμεν, ἠγήσατο εἴ τις ἐκ παίδων φευξεῖται διὰ τέλους, ὁπόταν εἰς ἀναγκαίους ἔλθῃ πόνους καὶ φόβους καὶ λύπας, φευξεῖσθαι τοὺς ἐν ἐκείνοις γεγυμνασμένους καὶ δουλεύσειν αὐτοῖς· ταὐτὸν δὴ τοῦτ', οἶμαι, καὶ πρὸς τὰς ἡδονὰς ἔδει διανοεῖσθαι τὸν αὐτὸν νομοθέτην.

II. For Greek Prose :—

Thus having attained a regal dignity to command all, which continued as aforesaid, where no other captain's authority endured but one year: he ever kept himself upright from bribes and money, though otherwise he was no ill husband, and could warily look to his own. As for his lands and goods left him by his parents, he did so husband them as he thought was his best and easiest way. For he sold in gross ever the whole year's profit and commodity of his lands, and afterwards sent to the market daily to buy the cates, and other ordinary provision of household. This did not like his sons that were men grown, neither were his women contented with it, who would have had him more liberal in his house; for they complained of his over hard and strait ordinary, because in so noble and great a house as his, there was never any great remain left of meat, but all things received into the house, ran under account, and were delivered out by proportion.

Life of Pericles: North's Translation.

MATHEMATICS.

Saturday, 5*th October* 1895.—2 *to* 5 *o'clock.*

1. Give the modern definition of similar and similarly situated figures; and compare it with Euclid's definition of similarity.

The sides of a triangle are parallel to fixed straight lines, and two of its vertices move on fixed straight lines. Find the locus of its third vertex.

2. Explain the use of the theory of loci in constructing

points which are subject to given conditions. As an example, discuss the construction of a point which is to be equidistant from two given straight lines, and at which two given points are to subtend a given angle.

Find the locus of the centre of a rectangle inscribed in a given triangle so that two vertices of the rectangle fall on the base of the triangle.

3. Show that the locus of the centres of all the circles which meet two given circles orthogonally is a straight line; and state some of the more important properties of this line.

Show how to construct a circle which has a given radius, passes through a given point, and cuts a given circle orthogonally.

4. Show how to construct an $(n-1)$-gon, having the same area as a given n-gon; and point out the application of this problem to the quadrature of a rectilinear area.

Given a quadrilateral, show how to circumscribe about it a rectangle having double its area. How many solutions of this problem are there?

5. Deduce formulae for calculating the radii of the inscribed and escribed circles of any triangle.

If two circles of radii, r and s respectively, touch each other externally, and t be the radius of the circle which touches both the given circles and also touches one of their direct common tangents, show that $1/\sqrt{t} = 1/\sqrt{r} \pm 1/\sqrt{s}$, $r > s$.

6. Show that the rectangle contained by the diagonals of a cyclic quadrilateral is equal to the sum of the rectangles contained by the two pairs of opposite sides. Prove, by means of this theorem or otherwise, that the ratio of the diagonal of a regular pentagon to its side is $\sqrt{5} + 1 : 2$.

7. Show that the locus of all the points which are harmonically conjugate to a given point with respect to a given circle is a straight line (Polar Theorem).

OAB is a diametral chord of a given circle, meeting it in A and B, OPQ any other chord. Find the locus of the intersection of AP and BQ.

8. Show that a common perpendicular can always be drawn to two given straight lines in space.

Calculate the distance between two opposite faces of a regular octohedron, each of whose edges is unity.

9. Find an expression for the area of the curved surface of a right circular cone.

A cylindrical hole is bored centrically through a sphere. Find the ratio of the diameter of the hole to the diameter of the sphere when the internal surface of the hole has maximum area.

10. Show that the quadratic function $Ax^2 + Bx + C$ can always be resolved into two real linear factors, provided $B^2 - 4AC > 0$. What is the condition that the coefficients of the factors be rational, A, B, C being themselves rational numbers?

Factorise $x^3 - 2x^2 - 2x + 1$;

$$(y-z)(x+2y+2z)^3 + (z-x)(2x+y+2z)^3 + (x-y)(2x+2y+z)^3.$$

11. Under what circumstances has the system $ax + by = 0$, $a'x + b'y = 0$ any solution besides $x = 0$, $y = 0$? What are to be regarded as the solutions in the exceptional case?

$$\text{If } x/(a-\lambda) + y/(b-\lambda) + z/(c-\lambda) = 1,$$
$$x/a + y/b + z/c = 1,$$
$$x/(a+\lambda) + y/(b+\lambda) + z/(c+\lambda) = 1,$$

show that $x = a(a^2 - \lambda^2)/(a-b)(a-c)$.

12. Trace the graph of the function $y = 1/(x^2 - 6x + 8)$, and show that it has a finite maximum value. What is its minimum value?

13. Define carefully the meanings of $a^{p/q}$, a^{-m}, a^0, stating all the restrictions necessary to avoid ambiguity and indeterminateness.

Assuming the laws of indices for positive indices, verify that $(ab)^{-m} = a^{-m}b^{-m}$.

If $x = \sqrt[3]{(a + \sqrt{b})} + \sqrt[3]{(a - \sqrt{b})}$, show that

$$x^9 - 6ax^6 - (15a^2 - 27b)x^3 - 8a^3 = 0.$$

14. Show that the Arithmetic, Geometric, and Harmonic

means between two positive quantities are in descending order of magnitude.

If the harmonic means between the first and second, between the second and third, and between the third and fourth of four quantities in Arithmetic progression be also in Arithmetic progression, show that the four quantities are equal.

15. If the sum of the digits which express any integer in the scale of notation whose radix is r be divisible by any factor of $r-1$, show that the integer itself is divisible by that factor of $r-1$.

Find all the integers divisible by 5 and by 9, whose digits in the scale of 10 are in Arithmetical progression, the number of these digits being three.

HIGHER GEOMETRY FOR WELSH MATHEMATICAL BURSARIES AND KELLAND PRIZE.

MONDAY, *7th October* 1895.—9 *to* 12 *o'clock.*

1. If two triangles have one angle of the one equal to one angle of the other, their areas are to one another as the products of the sides containing the equal angles.

The sides of a convex polygon are produced in the same direction in a common ratio ρ, and the extremities are joined to form a new polygon. The same is done with the sides taken in the opposite direction. Prove that the two polygons so obtained are equal in area.

2. The middle points of the sides of a quadrilateral form a parallelogram.

If the middle points of the sides of a figure of an even number of sides be given, then an infinite number of polygons can be described satisfying the conditions, if one can.

The middle points of the sides of a quadrilateral form a square of side β. Prove that the minimum value of the sum of the squares of the sides is $8\beta^2$.

3. Show that the locus of a point from which two circles are seen under the same angle is a circle.

If, in particular, the circles touch externally, and the radius of the locus in question is equal to the distance between their centres, prove that the line of centres is divided in medial section at the point of contact.

4. If the common tangents to two non-intersecting circles be drawn, show that they intersect in pairs on the line joining the centres of the two circles.

Through a given point on the line of centres of two non-intersecting circles, to draw a secant to the circles, such that the parts intercepted by the circles are of equal length.

5. The projections on the sides of a triangle of any point on the circumcircle to the triangle are collinear.

$ABCD$ is a cyclic quadrilateral, O any point on the circumscribing circle. P, Q, R, S are the projections of O on the sides AB, BC, etc., respectively. Prove that PQ and RS meet on AC. Prove also that if BD be a diameter, then PQ is perpendicular to RS.

6. State and prove Ceva's Theorem.

The sides AB and AC of a triangle ABC are divided in the ratio ρ and $1/\rho$ respectively, and the lines joining the points of section to the extremities of the base meet in O. Find the ratio in which AO divides the base. Find also the locus of O as ρ assumes all possible values.

7. The Inverse of a circle is a circle or a straight line.

Prove that a system of circles possessing a common radical axis in general inverts into a system of coaxal circles. What becomes of the old radical axis, and what is the new radical axis?

Show that three non-intersecting circles may be inverted into three circles having two common tangents.

8. The locus of the middle points of a series of parallel chords in a conic is a straight line.

AB is any one of a system of parallel chords of an ellipse, divided in the ratio ρ in the point P. Show, by projection or otherwise, that the locus of P is an ellipse concentric with the given ellipse, and that tangents at the points A

and P to the respective ellipses meet on the diameter conjugate to AB.

9. The circle round the triangle formed by three tangents to a parabola passes through the focus.

Shew that a point may in general be found such that its images in four given lines lie in a straight line.

10. Shew that the cross ratio of any pencil of four lines is constant.

(α) Given four points in a plane, prove that in general an infinity of pencils of four lines can be found to pass through them and to form a harmonic pencil. What is the locus of the vertex?

(β) Reciprocate all the statements of (α).

11. Shew that parallel plane sections of a pyramid are similar polygons.

Prove the existence of the centroid of a tetrahedron.

The centroids of the faces of a tetrahedron are taken as the vertices of a new tetrahedron. Shew that this, and the original, tetrahedron may be looked on as similar and similary situated solids in space, and find their centre and ratio of similitude.

12. Find an expression for the volume of a sphere of radius r.

Find the volume of the largest ball that can be carved out of a mass of stone of the shape of a regular tetrahedron of edge equal to one foot.

Examination Papers for Ordinary Degree of M.A. in 1895-6.

DEPARTMENT OF LANGUAGE AND LITERATURE.

LATIN.

FIRST PAPER.

TUESDAY, 31*st March* 1896.—9 *to* 11 *o'clock.*

1. For Latin Prose:—

The story goes that when Quintus Ligarius was put on his trial as an enemy to Cæsar, and Cicero appeared as his advocate, Cæsar said to his friends: "We know beforehand that the prisoner is a pestilent fellow and a public enemy. what harm can it do to listen once again to a speech of Cicero?" But soon he felt himself strangely stirred by Cicero's opening words, and as the speech proceeded, instinct with passion and exquisite in grace, one might see rapid changes of colour pass over Cæsar's face bearing witness to the tide of emotions ebbing and flowing through his mind. At length, when the speaker touched on the struggle at Pharsalia, Cæsar became so agitated that his body trembled, and some papers which he was holding dropped from his hand. In the end he was carried by storm, and acquitted the accused.

UNSEEN TRANSLATION.

2. Translate:—

Ergo, ut ad primum illud revertar, sit orator nobis is, qui, ut Crassus descripsit, accommodate ad persuadendum possit dicere. Is autem concludatur in ea, quae sunt in usu civitatum vulgari ac forensi, remotisque ceteris studiis, quamvis ea sint ampla atque praeclara, in hoc uno opere, ut ita dicam, noctes et dies urgeatur; imiteturque

illum, cui sine dubio summa vis dicendi conceditur, Atheniensem Demosthenem, in quo tantum studium fuisse tantusque labor dicitur, ut primum impedimenta naturae diligentia industriaque superaret; quumque ita balbus esset, ut eius ipsius artis, cui studeret, primam litteram non posset dicere, perfecit meditando, ut nemo planius esse locutus putaretur; deinde quum spiritus eius esset angustior, tantum continenda anima in dicendo est adsecutus, ut una continuatione verborum, id quod eius scripta declarant, binae ei contentiones vocis et remissiones continerentur; qui etiam, ut memoriae proditum est, coniectis in os calculis, summa voce versus multos uno spiritu pronuntiare consuescebat; neque is consistens in loco, sed inambulans atque ascensu ingrediens arduo. Hisce ego cohortationibus, Crasse, ad studium et ad laborem incitandos iuvenes vehementer adsentior; cetera, quae collegisti ex variis et diversis studiis et artibus, tametsi ipse es omnia consecutus, tamen ab oratoris proprio officio atque munere seiuncta esse arbitror.

SECOND PAPER.

TUESDAY, 31*st March* 1896.—11.30 *to* 1.30 *o'clock.*

I. Translate with short explanations:—

(*a*) non magis audierit quam Fufius ebrius olim,
cum Ilionam edormit, Catienis mille ducentis
"mater te appello," clamantibus.

(*b*) "Quinte," puta, aut "Publi," gaudent praenomine molles
auriculae "tibi me virtus tua fecit amicum."

(*c*) sive Aquilo radit terras seu bruma nivalem
interiore diem gyro trahit, ire necesse est.

(*d*) "Iamdudum ausculto et cupiens tibi dicere servus
pauca reformido." "Davusne?" "ita, Davus, amicum
mancipium domino et frugi quod sit satis, hoc est,
ut vitale putes." "age, libertate Decembri,
quando ita majores voluerunt, utere; narra"

II. (*a*) Translate without notes :—

Hic tunc Umbricius, "Quando artibus," inquit, "honestis
nullus in urbe locus, nulla emolumenta laborum,
res hodie minor est, here quam fuit, atque eadem cras
deteret exiguis aliquid, proponimus illuc
ire, fatigatas ubi Daedalus exuit alas,
dum nova canities, dum prima et recta senectus,
dum superest Lachesi quod torqueat, et pedibus me
porto meis, nullo dextram subeunte bacillo.
Cedamus patria : vivant Artorius istic
et Catulus ; maneant qui nigrum in candida vertunt,
quis facile est aedem conducere, flumina, portus,
siccandam eluviem, portandum ad busta cadaver,
et praebere caput domina venale sub hasta."

(*b*) Translate and explain :—

1. Lugdunensem rhetor dicturus ad aram.
2. differt vadimonia praetor.
3. sic pugnas Cilicis laudabat et ictus
et pegma et pueros inde ad velaria raptos.
4. ipse capillato diffusum consule potat.
5. adpositam nigrae lunam subtexit alutae.

III. Translate, with short notes on points of law or history :—

(*a*) is fuit Lucilius Longus, omnium illi tristium laetorumque socius unusque e senatoribus Rhodii secessus comes. ita, quamquam novo homini, censorium funus, effigiem apud forum Augusti publica pecunia patres decrevere, apud quos etiam tum cuncta tractabantur, adeo ut procurator Asiae Lucilius Capito accusante provincia causam dixerit, magna cum adseverationc principis, non se ius nisi in servitia et pecunias familiares dedisse : quod si vim praetoris usurpasset manibusque militum usus foret, spreta in eo mandata sua : audirent socios.

(*b*) at P. Suillium quaestorem quondam Germanici, cum Italia arceretur convictus pecuniam ob rem iudicandam cepisse, amovendum in insulam censuit, tanta contentione animi, ut iure iurando obstringeret e re publica id esse.

(*c*) Fine anni excessere insignes viri Asinius Agrippa,

claris maioribus quam vetustis vitaque non degener, et Q. Haterius, familia senatoria, eloquentiae, quoad vixit, celebratae: monimenta ingeni eius haud perinde retinentur. scilicet impetu magis quam cura vigebat; utque aliorum meditatio et labor in posterum valescit, sic Haterii canorum illud et profluens cum ipso simul extinctum est.

IV. Translate, adding short notes:—

(1) Neque ante
Falcem maturis quisquam supponat aristis,
Quam Cereri, torta redimitus tempora quercu,
Det motus incompositos et carmina dicat.

(2) Ergo inter sese paribus concurrere telis
Romanas acies iterum videre Philippi;
Nec fuit indignum superis, bis sanguine nostro
Emathiam et latos Hæmi pinguescere campos.

(3) Sin armenta magis studium vitulosque tueri,
Aut fetus ovium, aut urentes culta capellas:
Saltus, et saturi petito longinqua Tarenti
Et qualem infelix amisit Mantua campum,
Pascentem niveos herboso flumine cycnos.

(4) Hic stupet attonitus rostris; hunc plausus hiantem
Per cuneos geminatus enim plebisque patrumque
Corripuit; gaudent perfusi sanguine fratrum,
Exsilioque domos et dulcia limina mutant,
Atque alio patriam quærunt sub sole jacentem.

V. Translate and briefly explain:—

(1) id vero periculum erat, quod levissimi ex Graecis, qui Parthorum quoque contra nomen Romanum gloriae favent, dictitare solent, ne maiestatem nominis Alexandri, quem ne fama quidem illis notum arbitror fuisse, sustinere non potuerit populus Romanus, et adversus quem Athenis, in civitate fracta Macedonum armis, cernente tum maxime prope fumantes Thebarum ruinas, contionari libere ausi sunt homines, id quod ex monumentis orationum patet, adversus eum nemo ex tot proceribus Romanis vocem liberam missurus fuerit?

(2) ceterum, id quod haud discrepat, contumacia adversus contemnentes humilitatem suam nobiles certavit; civile

ius, repositum in penetralibus pontificum, evulgavit fastosque circa forum in albo proposuit, ut, quando lege agi posset, sciretur; aedem Concordiae in area Vulcani summa invidia nobilium dedicavit, coactusque consensu populi Cornelius Barbatus pontifex maximus verba praeire, cum more maiorum negaret nisi consulem aut imperatorem posse templum dedicare.

VI. Epitomise the course of the war with Pyrrhus, and consider its effect on Roman supremacy in Italy.

Or,

Give a short sketch of the various attempts at agrarian legislation up the end of the second Punic War.

VII. Compare Horace and Juvenal in respect of the spirit and method of their Satire.

Or,

Criticise the merits and defects of Tacitus as a *political* historian.

GREEK.

FIRST PAPER.

WEDNESDAY, 1*st April* 1896.—9 *to* 11 *o'clock.*

I. For Greek Prose:—

Aratus the Sicyonian, in the childhood of our author, was the chief of the Achæan commonwealth; a man in principal esteem, both in his own country and in all the provinces of Greece; admired universally for his probity, his wisdom, his just administration, and his conduct; in remembrance of all which his grateful countrymen, after his decease, ordained him those honours which are only due to heroes. Him our Polybius had in veneration, and formed himself by imitation of his virtues, and is never wanting in his commendations through the course of his history. Yet even this man, when the cause of truth required it, is many times reproved by him for his slowness in council, his tardiness in the beginning of his enterprizes, his tedious and more than Spanish deliberations; and his heavy and cowardly proceedings are as freely blamed by our Polybius,

as they were afterwards by Plutarch, who questionless drew his character from this history.

II. For Unseen Translation :—

ΑΓ. φέρ' εἰπὲ νῦν, τότ' οἶσθα παῖδά μοί τινα
δοῦς, ὡς ἐμαυτῷ θρέμμα θρεψαίμην ἐγώ ;
ΘΕ. τί δ' ἔστι ; πρὸς τί τοῦτο τοὔπος ἱστορεῖς ;
ΑΓ. ὅδ' ἐστίν, ὦ τᾶν, κεῖνος ὃς τότ' ἦν νέος.
ΘΕ. οὐκ εἰς ὄλεθρον ; οὐ σιωπήσας ἔσει ;
ΟΙ. ἆ, μὴ κόλαζε, πρέσβυ, τόνδ', ἐπεὶ τὰ σὰ
δεῖται κολαστοῦ μᾶλλον ἢ τὰ τοῦδ' ἔπη.
ΘΕ. τί δ', ὦ φέριστε δεσποτῶν, ἁμαρτάνω ;
ΟΙ. οὐκ ἐννέπων τὸν παῖδ' ὃν οὗτος ἱστορεῖ.
ΘΕ. λέγει γὰρ εἰδὼς οὐδέν, ἀλλ' ἄλλως πονεῖ.
ΟΙ. σὺ πρὸς χάριν μὲν οὐκ ἐρεῖς, κλαίων δ' ἐρεῖς.
ΘΕ. μὴ δῆτα, πρὸς θεῶν, τὸν γέροντά μ' αἰκίσῃ.
ΟΙ. οὐχ ὡς τάχος τις τοῦδ' ἀποστρέψει χέρας ;
ΘΕ. ὀύστηνος, ἀντὶ τοῦ ; τί προσχρῄζων μαθεῖν ;
ΟΙ. τὸν παῖδ' ἔδωκας τῷδ' ὃν οὗτος ἱστορεῖ ;
ΘΕ. ἔδωκ'· ὀλέσθαι δ' ὤφελον τῇδ' ἡμέρᾳ.
ΟΙ. ἀλλ' εἰς τόδ' ἥξεις μὴ λέγων γε τοὔνδικον.
ΘΕ. πολλῷ γε μᾶλλον, ἢν φράσω, διόλλυμαι.
ΟΙ ἀνὴρ ὅδ', ὡς ἔοικεν, ἐς τριβὰς ἑλᾷ.

SOPH., *Oed. Tyr.*, 1142-1160.

SECOND PAPER.

WEDNESDAY, 1*st April* 1896.—11.30 *to* 1.30 *o'clock.*

I. Translate :—

τὸν δ' ὁ γέρων Πρίαμος πρῶτος ἴδεν ὀφθαλμοῖσιν
παμφαίνονθ' ὡς τ' ἀστέρ' ἐπεσσύμενον πεδίοιο,
ὅς ῥά τ' ὀπώρης εἶσιν, ἀρίζηλοι δέ οἱ αὐγαὶ
φαίνονται πολλοῖσι μετ' ἀστράσι νυκτὸς ἀμολγῷ,
ὅν τε κύν' Ὠρίωνος ἐπίκλησιν καλέουσιν·
λαμπρότατος μὲν ὅ γ' ἐστί, κακὸν δέ τε σῆμα τέτυκται
καί τε φέρει πολλὸν πυρετὸν δειλοῖσι βροτοῖσιν·
ὣς τοῦ χαλκὸς ἔλαμπε περὶ στήθεσσι θέοντος.
ᾤμωξεν δ' ὁ γέρων, κεφαλὴν δ' ὅ γε κόψατο χερσὶν

ὑψοσ' ἀνασχόμενος, μέγα δ' οἰμώξας ἐγεγώνει
λισσόμενος φίλον υἱόν· ὁ δὲ προπάροιθε πυλάων
ἑστήκει, ἄμοτον μεμαὼς Ἀχιλῆι μάχεσθαι·
τὸν δ' ὁ γέρων ἐλεεινὰ προσηύδα χεῖρας ὀρεγνύς.

Write short notes on the syntax of the words underlined.

Scan :—(1) *ἔσσοντ'. ἄλλοι γάρ οἱ ἀποιρίσσουσιν ἀρούρας.*

(2) *αἱόλαι εὐλαὶ ἔδονται, ἐπεί κε κύνες κορέσωνται.*

Explain the forms *ἠείδης, γοόωσα, βείομαι, ἔδεσκε, δειδέχατο*; and the meaning of *ἀμφιθαλής, εἰνατέρες, ἐπιδώμεθα, ἀριζέμεναι, φοβήσομαι.*

II. (1) Translate :—

ἤξειν νομίζεις παῖδα σὸν γαίας ὕπο·
καὶ τίς θανόντων ἦλθεν ἐξ Ἄιδου πάλιν ;
ἀλλ' ὡς λόγοισι τόνδε μαλθάξαιμεν ἄν ;
ἥκιστα· φεύγειν σκαιὸν ἀνδρ' ἐχθρὸν χρεών,
σοφοῖσι δ' εἴκειν καὶ τεθραμμένοις καλῶς·
ῥᾳον γὰρ αἰδοῦς ὑποβαλὼν φίλ' ἂν τύχοις.
ἤδη δ' ἐσῆλθέ μ' εἰ παραιτησαίμεθα
φυγὰς τέκνων τῶνδ'· ἀλλὰ καὶ τόδ' ἄθλιον,
* *πενίᾳ σὺν οἰκτρᾷ περιβαλεῖν σωτηρίαν,*
ὡς τὰ ξένων πρόσωπα φεύγουσιν φίλοις
ἓν ἦμαρ ἠδὺ βλέμμ' ἔχειν φασὶν μόνον.
τόλμα μεθ' ἡμῶν θάνατον, ὃς μένει σ' ὅμως.

* Scan this line.

(2) Translate, with short explanatory notes :—

ΘΗ. *εἴ σ' ὄψεταί τις θῆλυν ὄντ', οὐκ αἰνέσει.*
ΗΡ. *ζῷ σοὶ ταπεινός ; ἀλλὰ πρόσθεν οὐ δοκῶ.*
ΘΗ. *ἄγαν γ'· ὁ κλεινὸς Ἡρακλῆς ποὺ κεῖνος ὤν ;*

III. (1) Translate :—

οὔτε γὰρ τῆς θαλάσσης ἔστι λιμὴν τοσοῦτος οὐδαμόθι, ὡς ἐγὼ εἰκάζω, ὅστις ἐγειρομένου χειμῶνος δεξάμενός σευ τοῦτο τὸ ναυτικὸν φερέγγυος ἔσται διασῶσαι τὰς νέας. καίτοι οὐκὶ ἕνα αὐτὸν δεῖ εἶναι τὸν λιμένα, ἀλλὰ παρὰ πᾶσαν τὴν ἤπειρον, παρ' ἣν δὴ κομίζει. οὕτω δὴ ἐόντων τοι λιμένων ὑποδεξίων, μάθε ὅτι αἱ συμφοραὶ τῶν ἀνθρώπων ἄρχουσι καὶ οὐκὶ ἄνθρωποι τῶν συμφορέων. Καὶ δὴ τῶν δύο τοι τοῦ ἑτέρου εἰρημένου τὸ ἕτερον ἔρχομαι ἐρέων. γῆ δὲ πολεμίη τῇδέ τοι κατίσταται· εἰ ἐθέλει τοι μηδὲν ἀντίξοον καταστῆναι, τοσούτῳ τοι γίνεται πολεμιωτέρη ὅσῳ ἂν προβαίνῃς ἑκατέρω, τὸ πρόσω αἰεὶ κλεπτόμενος· εὐπρηξίης γὰρ οὐκ ἔστι

ἀνθρώποισι οὐδεμία πληθώρη. καὶ δή τοι, ὡς οὐδενὸς ἐναντιευμένου, λέγω τὴν χώρην πλεῦνα ἐν πλέονι χρόνῳ γινομένην λιμὸν τέξεσθαι.

(2) Translate and explain with reference to the context:—

τὸ γὰρ εὖ βουλεύεσθαι κέρδος μέγιστον εὑρίσκω ἐόν· εἰ γὰρ καὶ ἐναντιωθῆναί τι ἐθέλει, βεβούλευται μὲν οὐδὲν ἧσσον εὖ, ἔσσωται δὲ ὑπὸ τῆς τύχης τὸ βούλευμα· ὁ δὲ βουλευσάμενος αἰσχρῶς, εἴ οἱ ἡ τύχη ἐπίσποιτο, εὕρημα εὕρηκε, ἧσσον δὲ οὐδέν οἱ κακῶς βεβούλευται.

IV. (1) Translate:—

Ὁ δὴ διώκει μὲν ἅπασα ψυχὴ καὶ τούτου ἕνεκα πάντα πράττει, ἀπομαντευομένη τὶ εἶναι, ἀποροῦσα δὲ καὶ οὐκ ἔχουσα λαβεῖν ἱκανῶς τί ποτ' ἐστὶν οὐδὲ πίστει χρήσασθαι μονίμῳ, οἵᾳ καὶ περὶ τἆλλα, διὰ τοῦτο δὲ ἀποτυγχάνει καὶ τῶν ἄλλων εἴ τι ὄφελος ἦν, περὶ δὴ τὸ τοιοῦτον καὶ τοσοῦτον οὕτω φῶμεν δεῖν ἐσκοτῶσθαι καὶ ἐκείνους τοὺς βελτίστους ἐν τῇ πόλει, οἷς πάντα ἐγχειριοῦμεν: Ἥκιστά γ', ἔφη. Οἶμαι γοῦν, εἶπον, δίκαιά τε καὶ καλὰ ἀγνοούμενα, ὅπῃ ποτὲ ἀγαθά ἐστιν, οὐ πολλοῦ τινὸς ἄξιον φύλακα κεκτῆσθαι ἂν ἑαυτῶν τὸν τοῦτο ἀγνοοῦντα, μαντεύομαι δὲ μηδένα αὐτὰ πρότερον γνώσεσθαι ἱκανῶς.

(2) Translate and explain briefly, with reference to the context:—

καί μοι ἐπὶ τοῖς τέτταρσι τμήμασι τέτταρα ταῦτα παθήματα ἐν τῇ ψυχῇ γιγνόμενα λαβέ.

V. Answer any *one* of the following questions:—

(1) State shortly, and illustrate by quotation, the Homeric conception of (1) Fate, (2) blood-guiltiness, (3) the position of women, (4) slavery.

(2) The history of Herodotus has been called an Epic: examine this criticism.

(3) Describe any of the forms which the character of Heracles assumes in Greek Literature.

VI. Answer any *two* of the following questions:—

(1) What were the various causes which contributed to the final overthrow of the Persians?

(2) Describe the constitution of Sparta, and sketch her history up to 480 B.C.

(3) Indicate the weak points in the constitution and administrative system of Athens in the 5th and 4th centuries B.C.

RHETORIC AND ENGLISH LITERATURE.

FIRST PAPER.

MONDAY, 30*th March* 1896.—9 *to* 11 *o'clock.*

1. Write an Essay on *one* of the following subjects:—
(*a*) The meetings of Touchstone and Jaques.
(*b*) The character of Lady Psyche in *The Princess.*
(*c*) "The purpose of a writer is to be read."—JOHNSON (*Life of Pope*).

2. Either (*a*) sketch with illustrations the history of the Latin element in the English Vocabulary; or, (*b*) name the chief dialects of English prevailing in the thirteenth century, and specify their areas and characteristic differences.

3. (*a*) Into what periods would you divide the history of Poetic Style from Spenser to Tennyson? Suggest briefly the characteristics of each period; or, (*b*) give Bain's Classification of the Figures of Speech, and illustrate it by examples.

4. Write a brief history of the Evolution of English Prose from Hooker to Addison.

5. Tell what you know of the chief authors and books of Old English Literature previous to the Conquest.

6. Either (*a*) give some account of the influence of French upon English Literature in the period of Chaucer, as regards both themes and manner; or, (*b*) give some account of the *Piers Plowman* poems, treating both their matter and their form.

SECOND PAPER.

MONDAY, 30*th March* 1896.—11.30 *to* 1.30 *o'clock.*

1. Either (*a*) trace the growth of the English Drama from Udall and Sackville to Shakespeare; or (*b*) give a brief account of the dramatists of the Restoration period.

2. (*a*) Discuss the position of Spenser in the history of English poetry, and instance later poets who have been, as to subjects or style, influenced by him; or (*b*) name the

more important lyric poets of the Seventeenth Century, and give, with illustrations, a fuller account of one of them.

3. Name the authors of *four* of the following works, and add a note as to style and literary or historical importance of each:—*The King's Quhair*, *Morte d'Arthur*, *Euphues*, *The Steel Glass*, *The Cypress Grove*, *Leviathan*, *Hudibras*, *Liberty of Prophesying*.

4. From your study of Macbeth, upon what points would you rely in fixing its date, and from what passages would you argue that another dramatist than Shakespeare has touched the play? Discuss this contention.

5. Either (*a*) give some account of the lyrics in *As You Like It* and the *Princess*, and consider their place in the structure of the poems; or (*b*) summarise De Quincey's appreciations of the writers whom he selects as the most eminent rhetoricians of the Seventeenth Century.

6. Which of Milton's sonnets were occasioned by events of his own life? Give quotations if you can.

7. (*a*) Tell the story of the Wanderer as given in Book I. of *The Excursion*, and refer the subject and its treatment to the views expounded by Wordsworth in his *Prefaces*; or (*b*) justify, from his review of *The Essay on Criticism*, the statement that Johnson is a specially valuable critic of Pope.

8. Annotate as many as you can of the following passages:—

(1) "You must borrow me Gargantua's mouth first."

(2) "Within the walls then view
The schools of ancient sages, his who bred
Great Alexander to subdue the world,
Lyceum there; and painted Stoa next."

(3) "No; this my hand will rather
The multitudinous seas incarnadine,
Making the green one red."

(4) "Dare ye for this adjure the civil sword
To force our consciences that Christ set free,
And ride us with a Classic Hierarchy
Taught ye by mere A.S. and Rutherford?"

(5) "It is therefore without justice that Dennis charges

The Rape of the Lock with the want of a moral, and for that reason sets it below the *Lutrin*."

(6) "Ours the fasts and feasts
Choës and Chutroi; ours the sacred grove
Agora, Dikasteria, Poikile."

(7) "The Scaligers, Casaubon, and Salmasius were much more critics on things than critics philologically."

(8) "Whene'er she moves
The Samian Heré rises and she speaks,
A Memnon smitten with the morning sun."

FRENCH.

FIRST PAPER.

SATURDAY, *4th April* 1896.—11.30 *to* 1.30 *o'clock.*

I. Translate, commenting on Victor Hugo's style as exemplified in these passages:—

(*a*) O pieds plats! votre plume au fond de vos masures
Griffonne, va, vient, court, boit l'encre, rend du fiel,
Bave, égratigne et crache, et ses éclaboussures
Font des taches jusques au ciel!

Votre immonde journal est une charretée
De masques déguisés en prédicants camus
Qui passent en prêchant la cohue ameutée
Et qui parlent argot entre deux orémus

Vous insultez l'esprit, l'écrivain dans ses veilles,
Et le penseur rêvant sur les libres sommets;
Et quand on va chez vous pour chercher vos oreilles
Vos oreilles n'y sont jamais!

(*b*) O Dieu vivant, mon Dieu! prêtez-moi votre force,
Et, moi qui ne suis rien, j'entrerai chez ce corse
Et chez cet inhumain;
Secouant mon vers sombre et plein de votre flamme
J'entrerai là, Seigneur, la justice dans l'âme
Et le fouet à la main,

Et, retroussant ma manche ainsi qu'un belluaire,
Seul, terrible, des morts agitant le suaire
Dans ma sainte fureur,
Pareil aux noirs vengeurs devant qui l'on se sauve,
J'écraserai du pied l'antre et la bête fauve,
L'empire et l'empereur!

(*c*) Translate:—La façade de la pension donne sur un jardinet, en sorte que la maison tombe à angle droit sur la rue Neuve-Sainte-Geneviève, où vous la voyez coupée dans sa profondeur. Le long de cette façade, entre la maison et le jardin, règne un cailloutis en cuvette, large d'une toise, devant lequel est une allée sablée, bordée de géraniums, de lauriers-roses et de grenadiers plantés dans de grands vases en faïence bleue et blanche. On entre dans cette allée par une porte bâtarde, surmontée d'un écriteau sur lequel est écrit: MAISON VAUQUER, et dessous: *Pension bourgoise des deux sexes et autres.* Pendant le jour, une porte à claire-voie, armée d'une sonnette criarde, laisse apercevoir au bout du petit pavé, sur le mur opposé à la rue, une arcade peinte en marbre vert par un artiste du quartier. Sous le renfoncement que simule cette peinture s'élève une statue représentant l'Amour.—BALZAC.

(*d*) Translate:—La race hâbleuse et bruyante des agents électoraux est la même partout; ceux-là pourtant se distinguaient par quelque chose de plus ardent, un zèle plus passionné, une vanité dindonnière, chauffée à blanc. Le plus petit greffier, vérificateur, secrétaire de mairie, instituteur de village, parlait comme s'il eût eu derrière lui tout un canton, des bulletins de vote plein les poches de sa redingote râpée. Et le fait est que dans les communes corses, Jansoulet avait pu s'en rendre compte, les familles sont si anciennes, parties de si peu, avec tant de ramifications, que tel pauvre diable qui casse des cailloux sur les routes trouve moyen de raccrocher sa parenté aux plus grands personnages de l'île et dispose par là d'une sérieuse influence.— DAUDET.

II. Translate into modern French (word for word) the following passage from old French:—

Li emperédre est repaidriez d'Espaigne,
Et vient ad Ais al meillor siét de France,
Montet el palais, est venuz en la sale.
Es li venude Alde, une bèle dame ;
Ço dist al rei : "Ou'st Rollanz li chataignes,
Qui me jurat come sa per a prendre ?"
Charles en at et dolor et pesance,
Ploret des oelz, tiret sa barbe blanche :
"Soer, chiére amie, d'home mort me demandes
Jo t'en donrai molt esforciét eschange,
Ço'st Lodevis, meillor n'en sai en France :
Il est mes filz et si tendrat mes marches."
Alde respont : "Cist moz mei est estranges.
Ne placet Deu ne ses sainz ne ses angeles
Après Rollant que jo vive remaigne !"
Pert la color, chiét as piez Charlemaigne,
Sempres est morte. Deus ait mercit de l'anme !
Franceis baron en plorent, si la plaignent.

III. Give short philological notes on the following words, mentioning doublets where these exist :—Libertin, légalité, payer son créancier, Providence, vilain, traître, prêtre, muer.

IV. (*a*) Explain the difference between : *grief* and grief, *solliciteur* and solicitor, *trépas* and trespass, *sentence* and sentence, *physicien* and physician, *nerveux* and nervous, *évidence* and evidence.

(*b*) Translate into idiomatic English :

à bon chat bon rat
gai comme un pinson
point d'argent, point de suisse
une bonne à tout faire
j'en suis pour mon argent
il tire le diable par la queue

V. Answer any *two* of the following questions (answers may be written in French or in English, but additional marks will be allowed for good French style) :—

(1) Expliquez l'infériorité de la Poésie française.

(2) Quelle a été l'influence de l'Académie française et de la tradition littéraire ?

(3) Que savez vous de l'œuvre de Chateaubriand?

VI. Answer any *one* of the following questions :—

(1) Donnez brièvement l'histoire de l'histoire de la Révolution française.

(2) Que savez vous de l'évolution de la Monarchie française?

(3) Quels sont les régimes qui se sont succédé depuis 1789, and donnez les causes de ces changements politiques.

SECOND PAPER.

SATURDAY, *4th April* 1896.—3 *to* 5 *o'clock.*

I. Translate :—

Qu'est-ce qu'un homme dans l'infini? Mais pour lui présenter un autre prodige aussi étonnant, qu'il recherche dans ce qu'il connait les choses les plus délicates. Qu'un ciron [*mite*] lui offre dans la petitesse de son corps des parties incomparablement plus petites, des jambes avec des jointures, des veines dans ces jambes, du sang dans ces veines, des humeurs dans ce sang, des gouttes dans ces humeurs, des vapeurs dans ces gouttes; que, divisant encore ces dernières choses, il épuise ses forces en ces conceptions, et que le dernier objet où il peut arriver soit maintenant celui de notre discours, il pensera peut-être que c'est là l'extrême petitesse de la nature. Je veux lui faire voir là-dedans un abime nouveau. Je lui veux peindre non seulement l'univers visible, mais l'immensité qu'on peut concevoir de la nature, dans l'enceinte de ce raccourci d'atome. Qu'il y voie une infinité d'univers, dont chacun a son firmament, ses planètes, sa terre, en la même proportion que le monde visible; dans cette terre, des animaux, et enfin des cirons, dans lesquels il retrouvera ce que les premiers ont donné; et, trouvant encore dans les autres la même chose, sans fin et sans repos, qu'il se perde dans ces merveilles, aussi étonnantes dans leur petitesse que les autres dans leur étendue; car qui n'admirera que notre corps, qui tantôt n'était pas perceptible dans l'univers, im-

perceptible lui-même dans le sein du tout, soit à présent un colosse, un monde, ou plutôt un tout, à l'égard du néant, où l'on ne peut arriver?—PASCAL.

II. Explain, in the formation of French, the rules of the persistence of the Latin accent, and of the loss of the medial consonant. Give illustrations.

III. Translate into French:—

1. As soon as you have done reading we shall go out.
2. His work is far from being ended.
3. They had persuaded each other that no one would dare to contradict them.
4. The actors whom we saw playing to-day are not the same that we heard applauded in London.
5. I should never have thought that it would have been possible to take the town without striking a blow.
6. I dare not go there unless you come with me.
7. It is with reputation as with wit, the more one aims at it the less one finds it.
8. Don't bear ill-will to me for it, I have done it for the best.

IV. Translate into French:—

(*a*) The ancient philosophers did not neglect natural science; but they did not cultivate it for the purpose of increasing the power and ameliorating the condition of man. The taint of barrenness had spread from ethical to physical speculations. Seneca wrote largely on natural philosophy, and magnified the importance of that study. But why? Not because it tended to assuage suffering, to multiply the conveniences of life, to extend the empire of man over the material world; but solely because it tended to raise the mind above low cares, to separate it from the body, to exercise its subtilty in the solution of very obscure questions. Thus natural philosophy was considered in the light merely of a mental exercise. It was made subsidiary to the art of disputation; and it consequently proved altogether barren of useful discoveries.—MACAULAY.

(*b*) So soon as she understood the nature of the debate between her husband and his guest, she declared roundly that

the former, instead of having occasion for more wine, had got too much already; and, far from using, in furtherance of his request, any of the huge bunch of keys which hung by a silver chain at her waist, she turned her back on him without ceremony, and ushered Quentin to the neat and pleasant apartment in which he was to spend the night, amid such appliances to rest and comfort as probably he had till that moment been entirely a stranger to; so much did the wealthy Flemings excel, not merely the poor and rude Scots, but the French themselves, in all the conveniences of domestic life.—SCOTT.

GERMAN.

FIRST PAPER.

MONDAY, *6th April* 1896.—9 *to* 11 *o'clock.*

I. Translate:—

(*a*) Einsiedelnd auf des Aetna Höhen haust
Ein frommer Klausner, von Uralters her
Der Greis genannt des Berges, welcher, näher
Dem Himmel wohnend als der andern Menschen
Tief wandelndes Geschlecht, den ird'schen Sinn
In leichter, reiner Aetherluft geläutert
Und von dem Berg der aufgewälzten Jahre
Hinabsieht in das aufgelöste Spiel
Des unverständlich krummgewundnen Lebens.

(*b*) Wohl läßt der Pfeil sich aus dem Herzen ziehn,
Doch nie wird das Verletzte mehr gesunden.
Lebe, wer's kann, ein Leben der Zerknirschung,
Mit strengen Bußkasteiungen allmählich
Abschöpfend eine ew'ge Schuld—ich kann
Nicht leben, Mutter, mit gebrochnem Herzen:
Aufblicken muß ich freudig zu den Frohen
Und in den Aether greifen über mir
Mit freiem Geist.

(*c*) Unser Herrgott selbst sollte richtend oben stehen; die blutigen Würgengel der Revolution schmetterten in die Posaunen; schwarzes Nachtgewölk, von Blitzen fahl durchleuchtet, schattete zur Linken des Richters, wo die schlechten Könige in den Abgrund stürzten, statt des Kopfes eine hohle Krone auf dem Rumpf, von einem züngelnden Flammen-

mantel statt des Purpurs umlodert, wo die Diplomaten von Schlangen umringelt wurden, die ewig rückschreitenden Pfaffen von großen Krebsen zernagt, die Fabellente von ihren Wappenthieren, von ächt heraldischen Greifen, Löwen und Adlern zerfleischt, oder unten im Abgrunde an vielästige Stammbäume als ihre eigenen Schildhalter aufgehängt, wo die blutsaugenden Reichen und Wucherer mit schweren Geldsäcken am Halse in bodenlosen Schlamm tiefer und tiefer versanken und vergebens den armen Lazarus, den gemeinen Arbeiter, der sich drüben aus seinen Lumpen erhob, anflehten, daß er ihnen das Centnergewicht ihres Geldsackes abnehmen möge.

(*d*) Beklagenswerther Mensch, der mit dem edelsten aller Werkzeuge, mit Wissenschaft und Kunst, nichts Höheres will und ausrichtet, als der Taglöhner mit dem Schlechtesten, der im Reiche der vollkommensten Freiheit eine Sklavenseele mit sich herumträgt!—Noch beklagenswerther aber ist der junge Mann von Genie, dessen natürlich schöner Gang durch schädliche Lehren und Muster auf diesen traurigen Abweg verlenkt wird, der sich überreden ließ, für seinen künftigen Beruf mit dieser kümmerlichen Genauigkeit zu sammeln. Bald wird seine Berufswissenschaft als ein Stückwerk ihn anekeln; Wünsche werden in ihm aufwachen, die sie nicht zu befriedigen vermag, sein Genie wird sich gegen seine Bestimmung auflehnen. Als Bruchstück erscheint ihm jetzt Alles, was er thut, er sieht keinen Zweck seines Wirkens, und doch kann er Zwecklosigkeit nicht ertragen. Das Mühselige, das Geringfügige in seinen Berufsgeschäften drückt ihn zu Boden, weil er ihm den frohen Muth nicht entgegensetzen kann, der nur die helle Einsicht, nur die geahnete Vollendung begleitet.

II. (*a*) Translate into English:—

"Wes pitet ir, min herre? wan beginnet ir der spil,
der iu diu küneginne teilet alsô vil?
unt lât uns balde schouwen wie diu sin getân."
sam ers niht enwesse, gebârt der listige man.

Dô sprach diu küneginne "wie ist daz geschehen
daz ir habt, her Sifrit, der spil niht gesehen,
diu hie hât errungen diu Guntheres hant?"
des antwurt ir Hagene ûzer Burgonden lant.

Er sprach "dâ het ir, vrouwe, betrüebet uns den muot:
dô was bi dem scheffe Sifrit der helet guot,
dô der vogt von Rîne diu spil iu an gewan:
des ist ez im unkünde," sprach der Guntheres man.

"Sô wol mich dirre mære" sprach Sifrit der degen,
"daz iuwer hôhverten ist alsô gelegen,
daz iemen lebet der iuwer meister müge sin.
nu sult ir, maget edele, uns hinnen volgen an den Rin."

(*b*) Die sonn het auch ir freud damit
Das so dapfer das schiff fortschritt,
Und schin so hell in bruder rinnen,
Das sie von fern wie spiegel schinen:
Das gestad scherzt auch mit dem schiff,
Wann das wasser dem land zulief,
Dann es gab ainen widerton,
Gleich wie die ruder teten gon:
Ain flut die ander trib so gschwind,
Das sie aim underm gsicht verschwind:
Ja, der Rein wurf auch auf klain wellen,
Die danzten um das schiff zu gsellen.
In summa, alles freudig war,
Die schiffart zu vollbringen gar,
Die vertröstung, rum zu erjagen,
Erhitzigt ir herz, nicht zu zagen.

III. Translate into idiomatic English:—

1. Er wird sich schon nichts weis machen lassen.
2. Er ist noch so ziemlich dabei weggekommen.
3. Das hatte ich ihm doch nicht zugetraut.
4. Sie haben sich doch wohl nicht gar geziert.
5. Schreiben Sie sich das nur ja hinter die Ohren.
6. Das kann ich ihm nun einmal nicht zumuten.
7. Darin hat er sich allerdings nicht verleugnet.
8. Ich habe ohnehin vor ihn in's Gebet zu nehmen.
9. Er hat sie öfters zum besten gehabt.
10. Das ist denn auch leider wirklich eingetroffen.

IV. (*A*) Answer any *two* of the following questions:—

(*a*) What is Lessing's position with regard to the rules and conventions of the French classical drama? Shew how far he follows, modifies or rejects them in "Minna von Barnhelm."

(*b*) What would you say are the characteristic features of Goethe's prose as exhibited in "Wahrheit und Dichtung"?

(*c*) State briefly the main points in Schiller's argument in favour of the chorus in tragedy.

(*d*) Point out the principal stages of the influence of English literature on that of Germany in the 18th Century.

(*e*) Which are the important turning points in Goethe's life? describe briefly its successive periods, mentioning some works characteristic of each.

(*B*) Answer any *one* of the following questions :—

(*Answers may be given in German, and additional marks will be allowed for fair German style.*)

(*a*) An welchen Punkten und in welchen Richtungen zeigt sich in der deutschen Geschichte romanischer Culturcinfluss?

(*b*) Welche Verdienste hat sich Karl der Grosse um die deutsche Cultur erworben?

(*c*) Worauf beruht die Machtstellung der römischen Kirche im deutschen Mittelalter?

(*d*) Welche Charaktereigenschaften und welche Verdienste haben Eugen von Savoyen zu einem deutschen Nationalhelden gemacht?

(*e*) Welches sind die Hauptereignisse des siebenjährigen Krieges?

SECOND PAPER.

MONDAY, *6th April* 1896.—11.30 *to* 1.30 *o'clock.*

I. Translate into idiomatic German :—

(1) They had come to blows.
(2) Have no dealings with them!
(3) I have changed my mind.
(4) The next day she was off and gone.
(5) I always thought a great deal of him.
(6) You must keep a tight hand over him.
(7) May I offer you another glass of wine?
(8) He made the speech extempore.
(9) He was not equal to the occasion.
(10) They came to pay their respects to the Count.

II. Translate into German :—

(*a*) By the way, Mrs Becky, not to be behind-hand in

sentiment, had got a miniature too hanging up in her room, to the surprise and amusement of most people, and the delight of the original, who was no other than our friend Jos. On her first coming to favour the Sedleys with a visit, the little woman, who had arrived with a remarkably small shabby kit, was perhaps ashamed of the meanness of her trunks and band-boxes, and often spoke with great respect about her baggage left behind at Leipzig, which she must have from that city. When a traveller talks to you perpetually about the splendour of his luggage, which he does not happen to have with him ; my son, beware of that traveller ! He is, ten to one, an impostor.—THACKERAY.

(*b*) I saw a book fastened to a desk, and instantly recollected that it was the Book of Martyrs. So it was. I had not been there during more than forty years. That is the only copy of the Book of Martyrs that I ever saw in a parish church. It is in tatters, thumbed to pieces—the first edition in black letter ; but I could make out the account of Tyndal and some prints of burnings. The parsonage was said, in 1812, to be the oldest in England, and was doubtless very old, with a hall as high as the house. It has since been pulled down. A new one has been built in very good taste, but I would rather have seen the old one. The parson, whom I remember rather shabbily dressed, and looking like a farmer, and whom Hannah More described as a poor preacher, and "not at all a gospel minister," as the phrase ran, is now lying under a stone near his pulpit.—MACAULAY.

III. Answer any *two* of the following questions :—

(*a*) In how far does Verner's law interfere with the effects of Grimm's law ? What do you understand by "grammatischer Wechsel" ?

(*b*) Say what you know about the phenomena called "Ablaut," "Umlaut" and "Brechung," and give examples of each.

(*c*) State points of difference between Middle-High-German and Modern-High-German as to pronunciation, spelling, accidence and syntax, using as the basis of your remarks the following passage (see below) :—

(*d*) Write short philological notes on any *fifteen* of the *italicised* words in the following passage :—

Er *vrâgte Sivriden*, den *gesellen sîn*,
"ist iu dass *iht künde umb* disiu *magedîn*,
die dort her *nider schouwen gein* uns ûf die *vluot*?
swie ir *herre* heisse, si sint vil hôhe gemuot."
Dô sprach der herre Sivrit "nu *sult* ir tougen *spehen*
under den *juncfrouwen*, und sult mir danne *jehen*
welhe ir nemen woldet, hêtet irs gewalt."
"dass *tuon* ich" sprach *Gunther* ein *ritter* küen unde balt.
"Sô *sihe* ich ir eine in jenem *venster* stân,
in snêwîsser *wæte*: diu ist sô wol getân,
die *wellent* miniu *ougen* durch ir schœnen *lîp*.
ob ich gewalt des hête, si müese werden min wip."

(*e*) Write short notes on the etymology of any *twenty* of the following :—

Spur, Leichnam, deutsch, Genosse, Scharmützel, edel, Ostern, elf, Feind, Häring, Gott, Ziegel, Welt, rächen, bereit, fertig, wissen, Demut, dulden, Vieh, keck, laut, Halm, Hedwig, Beichte, Bursch, Wachholder, tüchtig, weiland, hantieren, Garaus, vollends, Schalmei, widerspenstig, Schulze.

SANSKRIT.

FIRST PAPER.

THURSDAY, 19*th March* 1896.—9 *to* 11 *o'clock.*

I. Translate into English, with brief notes on the formation of the words in italics :—

(1) Hitopadeśa (ed. Johnson, 1847), i. lines 401-423 (in italic, *parokshe*).

(2) Ib. I. verses 15, 98, 139, 159 (in italic, *sāttvikam*, *gharmārtam*, *parishkṛitam*).

(3, 4) Nalopākhyāna, vii. 7-15; ix. 12-16 (in italic, *jihīrshavaḥ*).

II. (1) Nom., gen., loc. singular; nom. plur. of *takshan*, *bhartṛi*, *pratyac*, *akshi*, *sakhi*, *tiryac*.

(2) Dat., loc. singular; acc. plural of *go*, *bhū*, *jāti*, (f.), *kṛishṇa* (m. f. n.), *kiṃcit* (m. f. n.), *tvam*.

(3) *a*. Feminine of *etad*, *pati*, *yuvan*, *pṛithu*, *pāṇḍu*, *vidvān*, *jaghanvān*. *b*. Comparative and superlative of *priya*, *alpa*, *bahu*. *c*. Sanskrit for "62 ships."

(4) 1st and 3rd sing. and 3rd plur. Imperfect Parasm. and Ātmanep. of *sthā* (1), *brū* (2), *rud* (2), *bhī* (3), *bhid* (7).

(5) 1st sing. Optative, and 2nd and 3rd sing. Imperative Parasm. of *kṛi* (8), *āp* (5), *jñā* (9), *aś* (9), *dṛiś* (1).

(6) 3rd sing. and 2nd plur. Perfect and Aorist Parasmaip. of *dhā*, *kship*, *dṛiś*, *vas*, *vyadh*.

(7) Infinitive, past participle, and gerund of *dā*, *chid*, *nah*, *sic*, *vah*, *vi-ji*, *gam*.

SECOND PAPER.

THURSDAY, 19*th March* 1896.— 11.30 *to* 1.30 *o'clock*.

I. Translate into Sanskrit:—

In a town called Campaka there is a college of religious mendicants. There dwelt a mendicant named Cūḍākarṇa, who was wont to sleep after having put up on a forked peg his alms-dish containing the begged food remaining from his dinner. Of this food I, leaping up, used to eat daily. Presently a dear friend of his, a mendicant named Viṇākarṇa, came to see him. While engaged with him in various topics of conversation, Cūḍākarṇa, in order to frighten me, kept striking the ground with a piece of split cane. Seeing this, Viṇākarṇa said, "Friend, how is it that you are so inattentive to my conversation and taken up with some other matter?" "My good sir," said Cūḍākarṇa, "I am not inattentive, but this mouse is for ever eating my begged food contained in the dish." Viṇākarṇa, having observed the peg, said, "How is it that this mouse, having so little strength, leaps up so high? There must be some reason for this." Having considered for a moment, the mendicant said, "The reason in this case seems to be abundance of wealth, for—

Every wealthy man in the world is everywhere and at all times powerful:
For even to kings accrues a power founded on wealth."

II. (1) State what you know of *Pāṇini, Bhavabhūti, Yāska, Somadeva.*

(2) Describe in a few words the character of each of the following works, mentioning the author when known :— *Kādambarī, Daśakumāracarita, Mahābharata, Raghuvaṃśa, Vikramorvaśī, Śatapathabrahmaṇa, Śiśupālabadha, Sāmaveda.*

(3) Mention European words etymologically connected with any twelve of the following verbal forms, nouns, and adjectives :—*carati, chindanti, pricchati, śaṃsati, śerate, snāti, svādate, hanti ; abhra, ahi, kshiti, gharma, chāyā, yajña ; antara, anya, śreyān, sarva.*

CELTIC.

FIRST PAPER.

WEDNESDAY, 25*th March* 1896.—9 *to* 11 *o'clock.*

1. Translate into English :—

Do *neoch* tra do dáinib in domain nád rochet in cathraig sin asa mbíu ocus *dianid* érdalta a haittreb iar fugiull brátha is *intíb* airbirit co anbsaid ocus co utmall i n-dingnaib ocus i cnocaib i sescnib ocus *irrotaigib* a n-aitreba, co tí chucu bráth.

2. Parse fully the words in italics.

3. Translate into English :—

Is ann sin ro éirgetar in slóig uilé ina sesum do chomrád ocus d'imacallaim ria ocus ro éirig sisi maraen friu. Suidh a ingen ar Fionn ocus tuc th'uilinn fris in tulaig mad áil ní do chluinsin dúinne uait. Tuc iar sin a taeb ris in tulaig ocus ro fiarfaig in flaithféinnid scéla di,—cia tír as a tainic, cia hí féin. A tir na ningen aniar mar a fuinidh grian ; ocus ingén rig an tíre sin mé féin.

4. Point out old forms in this passage, in declension and gender.

5. Translate into English :—

As na briathraibh-sin do thuig an t-eagnaidheach dá

fhaide mhaireas duine, gurab cinnte dó an bás d'a rochtain; agus táinig do'n smuaineadh-sin gur dhiúlt sé d' áinius agus d' antlás an t-saoghail, agus do ghabh cuing crábhaidh ré 'ais agus do chaith a aimsir ó shin amach go haithrigheach.

6. Explain fully the *t* in "an t-saoghail" and the first *h* in "go haithrigheach" in this passage.

7. How were *no, ro, do,* used in tense-formation in old Gaelic? What is the usage in modern Scottish and modern Irish Gaelic?

8. Give a full note on the etymology and construction of any two of the three prepositions, *air, ann, de.*

9. "Eirich, a Chuchullin, éirich,
Chi mi loingeas threun o thuath!
Grad ghluais, a chinn uidhe na féile:
'S mòr Suaran, is lionmhor a shluagh!"
"'Mhic Fhithil, 's e Fionnghal a th'ann
Ard churaidh nan ciar bheann."

Translate this passage, and indicate briefly its bearing upon the authorship of the poem.

SECOND PAPER.

WEDNESDAY, 25*th March* 1896.—11.30 *to* 1.30 *o'clock.*

1. Translate into English:—

Bha eoin an t-sleibhe 'n an ealtain ghle ghloin,
A' gabhail bheusan air gheig sa' choill,
An uiseag cheutach, 's a luinneag fein aice,
Feadan speiseil gu reidh a' seinn:
A' chuag 's smeorach air bharr nan ogan,
A' gabhail oran gu ceolmhor binn:
'N uair ghoir an cuanal gu loinneil guanach
'S e 's gloin' a chualas am fuaim sa' ghleann.
'N uair thig iad comhla na bheil a' d' choir-sa
De'n h-uile seorsa bu choir bhi ann;
Damh na croice air srath na mointich
'S e gabhail cronain le dreocam ard.

2. Translate into English, and parse fully every word in the sentence:—

"Oir gheibh thu comain ann an aiseirigh nam firean."

Explain the etymology of *comain*.

3. Translate into Scottish *or* Irish Gaelic :—

But Christianity tells us that Christ has died to take away our sins, and it speaks first to our sense of remorse. It brings us a sense of pardon. Is it the experience of our readers that they hear much of this in the preaching of to-day? If not, the whole content of the Christian Gospel has been omitted. Our sins are forgiven for His name's sake. We who have believed do enter into rest. The past has been blotted from the memory of God, and the soul is at home in the bosom of atoning love. That is the primal fact.

4. Write out the following passage in the idiom and orthography of to-day (Scottish *or* Irish Gaelic) :—

Ocus nír chian dóib co táncadar neoil deirid lái chuca. Ocus tecait rompa ó'n eas, ocus atchiat fer mór ar tulaig ar a cionn, ocus ro shuidset ina fharrad. Canas tancabair, ar in t-óclach? Innisit do a nainm ocus a slonnad. Cuich thusa, ar iat? Boaire mise, ar se, ó Chúil Radhairc fris-an-abar Cúil ó bFinn isin tan so. Áigidecht na hoidche anocht do b'áil linne d'fagháil uait, ar Cáilte.

5. Write a brief account of the life and works of Duncan Ban MacIntyre, *or* Dugald Buchannan.

DEPARTMENT OF MENTAL PHILOSOPHY.

LOGIC AND PSYCHOLOGY.

FIRST PAPER.

MONDAY, 30*th March* 1896.—3 *to* 5 *o'clock.*

1. Distinguish between —(*a*) The Collective and the Distributive Use of Terms; (*b*) Synthetic and Analytic Propositions; (*c*) A Disjunctive Syllogism and a Dilemma; (*d*) Ignoratio Elenchi and Petitio Principii.

2. Explain and exemplify the principal kinds of Immediate Inference. Are the processes correctly described as Inferences?

3. (*a*) Arrange the following propositions in a series of syllogisms and draw the conclusion; (*b*) exhibit the reasoning in the form of a regular Sorites.

1. All the Eton men in this College play cricket.
2. None but the Scholars dine at the higher table.
3. None of the cricketers row.
4. *My* friends all come from Eton.
5. All the Scholars are rowing men.

4. Explain the Attributive Theory of the Proposition, and consider its applicability to all forms of the Proposition.

5. Explain carefully the nature of the Method of Residues, and give an example of its application. What is its relation to the Method of Difference?

6. Consider what is the nature and importance of Verification in science, and illustrate your account.

7. Estimate the value of Bacon's contribution to modern thought.

SECOND PAPER.

TUESDAY, 31*st March* 1896.—3 *to* 5 *o'clock.*

1. Give an account of the chief sources from which the data of Psychology are derived, and an estimate of their comparative value.

2. Distinguish carefully the phenomena of Perception from those of Sensation and of Imagination. Are the differences of kind, or of degree only?

3. Give Berkeley's theoretical account of the experiences of a man, born blind, and suddenly restored to sight. How far has his theory been confirmed by experimental evidence?

4. "An idea which, considered in itself, is particular, becomes general by being made to represent or stand for all other particular ideas of the same sort." Discuss this passage, and in your answer explain what you consider to be the nature and function of "General Ideas."

5. Explain and criticise the application of the following

Metaphors made by Locke:—(*a*) the Tabula Rasa; (*b*) the Mirror; (*c*) the Dark Room.

6. What is the meaning in Berkeley's theory: (*a*) of the existence, (*b*) of the permanence, (*c*) of the causality of the material world?

7. Give Hume's account of our idea of Power, as regards the origin and the validity of the idea, and his criticism of Locke and of Berkeley in this connection.

MORAL PHILOSOPHY.

FIRST PAPER.

THURSDAY, *2nd April* 1896.—11.30 *to* 1.30 *o'clock.*

1. Contrast Instinctive Action with Voluntary, and compare them as regards their ethical worth.

2. Sketch the process of formation of an ethical concept, *e.g.*, Honesty, and discuss the relation of Concept to Law.

3. How far is the State to be regarded as the standard of individual morality? Examine the mutual relations of Moral and Civil Law.

4. What is meant by "the Diversity of Moral Judgments?" Can it be regarded as a valid argument against the Intuitional Theory of Ethics?

5. Analyse the conception "Duty." Does its recognition as binding imply either (*a*) a necessary relation to other moral beings, or (*b*) the presence of inward hindrances to action?

6. Outline the Evolutionist system of Ethics. How far does it represent an advance on earlier Hedonist schemes?

SECOND PAPER.

THURSDAY, *2nd April* 1896.—3 *to* 5 *o'clock.*

1. Discuss the relation, in Butler's theory, of Self-Love (*a*) to Benevolence, and (*b*) to Conscience.

2. In what sense does Butler regard "Nature" as the standard of ethical action? How does he answer the

objection that to follow nature means to act upon the passion or instinct which at the moment is strongest?

3. Explain the nature and examine the validity of Mill's Proof of Utilitarianism.

4. Consider the relation of the Human Good to the Divine as it is presented in Plato and in Aristotle.

5. Characterise the ideally wise man of the Stoic and of the Epicurean Schools.

6. Give some account of the ethical doctrines of Hobbes and of Shaftesbury, indicating the points of contrast between them.

POLITICAL ECONOMY.

FIRST PAPER.

WEDNESDAY, *18th March* 1896.—9 *to* 11 *o'clock.*

(*Answer* EIGHT *Questions only.*)

1. Describe briefly the chief methods used in Political Economy, and explain the nature of Economic Laws.

2. On what grounds may skill be included under Capital, and for what purposes is it generally more convenient to distinguish carefully between Labour and Capital?

3. Analyse the causes of the increase of efficiency due to Division of Labour. Show how it is connected with the Law of Increasing Return.

4. What does Adam Smith mean by a *Quantity of Labour*? What are the chief causes of variation in the *Quantity of Labour* in this sense?

Explain the terms: *Marginal Disutility of Labour* and *Net Product* of a man's labour.

5. State accurately the Law of Diminishing Return to Land, and explain its bearing on the theory of Economic Rent.

6. "Time Earnings do not tend to Equality, but Efficiency Earnings do." Explain this statement.

Indicate the elements to be taken into account in distinguishing Real and Nominal Wages.

7. What are the Economic Foundations of Private Property? What modifications would be introduced by the adoption of State Socialism?

8. How far does the Rate of Profits tend to Equality? What is the meaning of *Quasi-Rent*?

9. Discuss the effects of Trade Unions upon the *general rate of Wages*.

Under what conditions is a Strike in a particular industry likely to be successful?

10. "Price determines Rent and not Rent Price." Explain the general principle, and notice the principal exceptions.

11. What assumptions are involved in the Wages Fund Theory? What changes are introduced by the Produce Theory of Wages?

SECOND PAPER.

WEDNESDAY, 18*th March* 1896.—11.30 *to* 1.30 *o'clock*.

(*Answer* EIGHT *Questions only*.)

1. What is meant by the Temporary Equilibrium of Demand and Supply in a Market? Explain accurately the terms used.

2. Distinguish between Value and Price. Explain the use of Index Numbers and the proposal for a Tabular Standard of Value.

3. Describe generally the effects of Demand and of Cost of Production respectively upon Supply.

4. Explain the terms Appreciation and Depreciation, as applied to the various relations of Value between Gold, Silver, and Commodities.

5. Trace the Development of Deposit Banking.

Why are issues of Bank Notes generally placed under stringent regulations compared with other instruments of Credit?

6. What is involved in International Bi-Metallism?

Note, with brief comments, the principal *objections* to such a system.

7. Explain the application of Gresham's Law to Token Coins and to Inconvertible Notes.

8. Why does Adam Smith think it generally unnecessary and undesirable to protect the home industries against foreign competition? What are the exceptions he admits under certain circumstances?

9. Examine the principal effects of Bounties upon Exports.

10. On what grounds did Adam Smith condemn the *Monopoly* of the *Colonial Trade.*

11. Examine carefully Adam Smith's first Canon of Taxation, and state briefly his other Canons.

THEORY, HISTORY, AND ART OF EDUCATION.

M.A. Pass and Schoolmaster's Diploma.

FIRST PAPER.

FRIDAY, *27th March* 1896.—9 *to* 11 *o'clock.*

1. What are the claims of the Doctrine of Method in Education? Justify them scientifically and from experience.

2. Trace the order of the unfolding of Intellectual Power as far as Sense-Conception, and relate to each stage the practical lessons for the Educator.

3. Discuss the place of Memory in a reasoned Theory of Education and point out the more important conditions of its power.

4. Give some account of the more important physiological conditions of Mental activity and receptivity, and derive rules for School work therefrom.

5. Explain the formation of the General Concept, and show its significance and importance in the process of Education.

6. Take any *four* of the Rules of Method, and justify them from the Philosophy of Mind.

7. Analyse Mind as an Ethical Activity.

8. Apply the Rules of Method to—

(*a*) The Teaching of English Grammar; *or*

(*b*) The Teaching of any Elementary Science.

SECOND PAPER.

FRIDAY, *27th March* 1896.—11.30 *to* 1.30 *o'clock.*

1. By what considerations does Locke in the *Thoughts* support his statement that the use of the rod is the instrument of government "most unfit of any" to be used in education?

2. How does Locke propose to cultivate in children the virtue of Justice? State and criticise his proposed treatment of "Wants of fancy and those of nature" respectively.

3. What does the same writer regard as the "great principle and foundation of all virtue and work?" Show what he finds to be the common mistakes in connection with this and what results follow.

4. Summarize the main positions laid down in the section of the *Conduct* entitled *Principles.* Why is it that "careful and wary conduct" is needed in the use of books?

5. Explain the statement that "Association is a disease of the mind as hard to be cured as any." What remedies are proposed?

6. Explain, with illustrations, the Rule of Method—"Teach generalizations as generalizations;" also how in the teaching of Latin the Rule to "Evoke the Will" may be observed. On what ground is it maintained that the study of Latin "influences the tone of thought and character."

7. How are *training* and *discipline* distinguished in the book on "Language and Linguistic Method"? Sketch the *course* of instruction, there suggested, in Language as a formal discipline.

SCHOOLMASTER'S DIPLOMA.

THIRD OR ADDITIONAL PAPER.

SATURDAY, *28th March* 1896. 10 *to* 12.30 *o'clock.*

1. Show, with some fulness, the nature of the new conception of human life, as contrasted with that of the Eastern nations that first arose among the Hellenic races, and how

the conception of the ends of education was affected thereby.

2. Give the substance of the passage from the *Protagoras* in which the education of a young Athenian is sketched. Explain the functions of Music in both the wider and the narrower sense, and of Gymnastic in Greek Education.

3. Characterise fully Roman Education of the Third National Period (148 B.C. onwards). Illustrate by references made in the poets to schools, discipline, and studies.

4. What is Quintilian's teaching (1) as to the mode in which language should be studied; (2) the ends served by a study of Music and Geometry for the orator; and (3) the use of emulation and of corporal punishment.

5. What was the Renascence ideal of Education? What are the leading defects of that ideal? Give the substance of Montaigne's criticism of it.

6. State the most valuable ideas which Milton in his *Tractate* has contributed to educational thought.

7. Trace the interaction of the Intellectual and Ethical in Education.

How would you introduce a class for the first time to a lesson in Proportion in Arithmetic? *Or*, What steps would you take in giving a reading lesson to a class in Standard V.?

Thesis on either (*a*) The Organization of Instruction in a school where the pupils are from the age of 11 to 17, giving grounds for your opinions; or (*b*) The Method of *Instruction* in Ethical ideas. (The Thesis to be posted to Prof. LAURIE on Tuesday night.)

PHILOSOPHY OF LAW. See Faculty of Law.

DEPARTMENT OF SCIENCE.

MATHEMATICS.

FIRST PAPER.

WEDNESDAY, 1*st April* 1896.—3 *to* 5 *o'clock.*

1. If in two triangles ABC and PQR $AB = PQ$, $AC = PR$, then $BC > = < QR$ according as the angle $A > = <$ the angle P.

ABC, $DEFG$ are a triangle and a quadrilateral such that $AB = DE$, $BC = EF + FG$, and the angles at B and E are equal. Shew that $AC > DG$.

2. Shew that four circles can be described which touch three given straight lines; and that the centres of these circles and the intersections of the given straight lines are collinear in six triads.

Find the radius of a circle which touches two sides of an equilateral triangle internally, and also touches the inscribed circle.

3. Divide a given straight line AB internally and externally in points C and D, so that $AC^2 = AB.BC$, $AD^2 = AB.BD$.

Shew how to produce AB to E, so that $EA.EB = AB^2$.

4. Shew that in any triangle ABC the rectangle contained by AB and the projection on it of AC is equal to the rectangle contained by AC and the projection on it of AB.

Prove that each of the lines joining the middle point of BC to the projections of B and C on the opposite sides is half the side BC.

5. If a chord of a circle passes through a fixed point, shew that the rectangle under the segments of the chord is independent of the direction of the chord.

In a triangle ABC, E and E' are taken on the bisector of the angle B, so that BE and BE' are each a geometric mean between BA and BC, F and F' on the bisector of C, so that CF and CF' are each a geometric mean between CB and CA. Shew that $EE'FF'$ are concyclic; and find the radius of the circle on which they lie in terms of the sides of the triangle.

6. Prove that the areas of similar triangles are in the duplicate ratio of their homologous sides.

OA and PQ are two diameters of a circle. OP meets the tangent at A in R, and QR meets OA in T. Shew that $OT : TA = OR^2 : OA^2$.

7. Prove that the distances of the orthocentre of a triangle from the vertices are double the distances of the

circumcentre from the sides respectively opposite these vertices.

If x,y,z be the distances of the orthocentre from the vertices of a triangle whose sides are a,b,c, shew that $\Sigma x^2 + \Sigma a^2 = 12R^2$, R being the circumradius.

8. Express the diagonal of a rectangular parallelepiped in terms of its edges.

Find the area of the sections of a cube of side a (1) by a plane through two edges not belonging to the same face; (2) by a plane through three, and only three, vertices.

Or, as an alternative—

Express the area of an ellipse in terms of its axes.

Given the latus rectum of an ellipse and a circle of equal area, find the lengths of its axes.

9. In an ellipse, prove that the subnormal is to the central abscissa in the duplicate ratio of the axes.

If the normal at the end of the latus rectum of an ellipse bisects the distance between the centre and the vertex, find the eccentricity.

Or, as an alternative—

Find the areas of the regular n-gons inscribed in and circumscribed about a circle.

Deduce an expression for the area of a circle.

10. Prove that the cross ratio of the four points in which a movable tangent to a circle meets four fixed tangents is constant.

AB is a diameter of a circle, T any point on this diameter produced; $TUVW$ is a tangent meeting the tangents at A and B, and a tangent parallel to AB in U, V, W respectively; shew that $TU.TV = TW^2$.

11. Define the function $\tan\theta$, and shew that it has the period π (θ being measured in radians). Also prove geometrically for all values of θ that $\tan(\pi - \theta) = -\tan\theta$.

Trace the graph of $y = x \sin x$.

Solve the equation—

$$\sqrt[3]{(1 - \sin x)} + \sqrt[3]{(1 + \sin x)} = \sqrt[3]{(1 - \cos x)} + \sqrt[3]{(1 + \cos x)}$$

12. If (x,y) be the co-ordinates of a point referred to a pair

of rectangular axes, (ξ, η) the co-ordinates of the same point referred to another pair of rectangular axes having the same origin, calculate x and y in terms of ξ and η: and deduce an addition theorem for the trigonometrical functions.

If $\theta + \varphi = \alpha$, shew that

$$\cos^2\theta + \cos^2\varphi - 2\cos\alpha\cos\theta\cos\varphi = \sin^2\alpha.$$

If $A + B + C = \pi$, shew that

$$\Sigma\cos 2A + \Sigma\cos^2 A + 6\cos A\cos B\cos C = 0.$$

SECOND PAPER.

THURSDAY, *2nd April* 1896.—9 *to* 11 *o'clock.*

1. Write down the most general symmetrical homogeneous integral function of the 4th degree of x and y; and find the relations among the co-efficients when it is divisible by $x^2 - y^2$.

2. Shew that the condition that an integral function $f(x)$ be divisible by $x + a$ is $f(-a) = 0$.

Shew that $x^3 + 15x^2 + 74x + 120$ is divisible by $x + 5$; and find the other factors.

3. If L, P, Q be integral functions of x, and P prime to Q, shew that the proper fraction $L \div PQ$ can be decomposed into a sum of proper fractions whose denominators are P and Q.

Decompose in this way $(3x^2 - 3x + 2) \div (x - 1)^2 (x^2 - x + 1)$.

Or, as an alternative—

Explain the method for constructing a table of logarithms by inserting arithmetic and geometric means.

Calculate to 3 places of decimals the number whose logarithm to base 10 is ·75.

4. Find the condition that the quadratic $ax^2 + bx + c = 0$ shall have (1) equal roots, (2) one root infinite.

Trace the graph of $y = (x - 1)^2 (x - 2)(x - 3)$; and find and discriminate the turning values of y.

5. How many solutions in general has a system of two simultaneous equations each of the second degree in x and y?

Solve the system $x^2+y^2+x=\frac{5}{2}xy$, $y^2+2x=2xy$; and account for the theoretical number of solutions.

Solve also $12(x^4+1)-91(x^3+x)+194x^2=0$.

6. When is a series said to be *absolutely convergent*, and when *semi-convergent*?

Shew that Σn^{-2} is absolutely convergent.

Discuss the convergency of (1°) $\Sigma(-1)^{n-1}/(2n-1)$; (2°) $\Sigma(x/n)^n$; (3°) $\Sigma\cos(2n\pi/p)$.

7. Evaluate $\underset{x=0}{L}\sin x/x$; $\underset{x=1}{L}(x^m-1)/(x-1)$, m being an integer.

Deduce $\underset{x=0}{L}\tan x/x$; $\underset{x=1}{L}(x^{p/q}-1)/(x-1)$, p and q being integers.

Or, as an alternative—

Prove that, if $f(z)$ denote $1+z+z^2/2!+z^3/3!+\ldots\ldots ad\ \infty$, then $f(x)\,f(y)=f(x+y)$.

Hence shew that when x is an integer $f(x)=e^x$, where e is a certain number. What is the value of $f(x)$ when x is real and commensurable but not integral?

8. Prove that $(\cos\theta+i\sin\theta)^m=\cos m\theta+i\sin m\theta$, m being a positive integer.

Construct in Argand's diagram the square roots of a given complex quantity.

Sum, by means of the theory of complex numbers or otherwise, the series

$$1+x\cos\theta+x^2\cos 2\theta+\ldots\ldots+x^n\cos n\theta.$$

Or, as an alternative—

Deduce from its focal definition the equation to a central conic in the form $Ax^2+By^2=1$.

Find the length of the perpendicular from the centre on the tangent at the point (x',y').

9. If x, p, q be all positive, $x\neq 1$, p and q integers and $p>q$, prove that $(x^p-1)/p>(x^q-1)/q$.

Discuss the inequality $1/\sqrt{(x-1)}+1/\sqrt{(x-3)}>=<2/\sqrt{(x-2)}$.

Or, as an alternative—

Find the angle between the straight lines whose equations are $Ax+By+C=0$, $A'x+B'y+C'=0$.

The projections of a point (x,y) on the axes of x and y respectively subtend an angle of 60° at the point (1,1): shew that the locus of (x,y) is given by $xy-(1+\sqrt{3})(x+y)+2\sqrt{3}=0$; and roughly trace this locus.

10. Establish logarithmic formulae for calculating the side a of a triangle ABC when b, c, and A are given.

At points E and F (both external and both on the same side) on one diagonal of a square the other diagonal subtends angles 2α and 2β: find a logarithmic formula for calculating the side of the square in terms of α, β, and EF.

11. If p be the scalar length of the perpendicular from the origin on a straight line, and α the inclination of the perpendicular to the x-axis, shew that the perpendicular from the point (x,y) on the line is given by $x\cos\alpha+y\sin\alpha-p$; and explain the significance of the sign of this expression.

Find the equations to the straight lines through (1,1), each of which has the property that the sum of the scalar values of the perpendiculars on it from the points (2,1) and (1,2) is equal to $\frac{1}{2}$. What is the maximum possible value of this sum in the present case?

12. Prove geometrically that the locus of the middle points of a series of parallel chords of a conic section is a straight line.

To construct the centre of a conic which touches two given straight lines, each in a given point, and also touches another given straight line parallel to one of the two former.

Or, as an alternative—

Shew that the equation to the tangent at $(x'y')$ to the conic $ax^2+2hxy+by^2+2gx+2fy+c=0$ is

$$(ax'+hy'+g)x+(hx'+by'+f)y+(gx'+fy'+c)=0.$$

Shew that the equation $x^2+2hxy+y^2-2x-2y+1=0$ represents a one-fold infinity of conics, each of which touches the axes of x and y in fixed points; and find the equation to the locus of the points of contact with these conics of tangents drawn from a fixed point on the axis of x.

NATURAL PHILOSOPHY.

FIRST PAPER.

FRIDAY, *3rd April* 1896.—9 *to* 11 *o'clock.*

(*Not more than* EIGHT *Questions to be attempted.*)

1. Give Newton's Second Law of Motion, explaining the terms employed. Point out precisely the classes of questions which it enables us to answer, and thus show the necessity for a Third Law.

2. Is the distinction between "relative" and "absolute" velocity logical? If all motion is relative, what is the meaning of the kinetic energy of a particle?

3. Define the term Force, as it is employed in Newton's system. Examine the conception from the point of view that Matter and Energy are the only objective realities in the Physical Universe.

4. Define Acceleration; pointing out its essential character and its law of composition; and find its value in the uniform circular motion of a point. Apply the result to the case of a simple pendulum, moving in any manner consistent with small deflection from the vertical.

5. Explain the "Equation of Time." What are the causes of the irregularity of the Sun's motion in hour-angle?

6. Define the unit of force called a Dyne, and compare it with the weight of a gramme. What changes must be made in the units in order that the attraction between two particles of masses m and m', at distance a apart, may be *equal to* mm'/a^2?

7. Trace, as completely as you can, the transformations of energy that occur when a shot is fired from a gun and hits a target.

8. Explain how a boat may sail to windward. Why can few boats sail within 45° of the wind?

9. When a body slides down a rough inclined plane, show how the time of descent depends upon the co-efficient of friction, and find the fraction of the initial energy which is converted into heat. Why is no energy lost when a body rolls down a rough plane?

10. Wherein consists the difference in the internal stresses of a fluid at rest, and of other continuous substances? Give the differentia which distinguishes a perfect fluid from other fluids. Show that the pressure at a point in a perfect fluid is the same in all directions.

11. A narrow glass tube, open at both ends, is dipped vertically into water, so that two-thirds of its length are immersed. The upper end is then closed with the finger, and the tube lifted out. Neglecting the effect of capillarity, find what fraction of its length will be filled with water? Why does the answer involve the length of the tube?

12. Show how to find the form of the free surface of water in a pail, the whole rotating as if solid.

13. Point out the general nature and explanation of the effects produced on the path of a spherical projectile by its rotation. Mention other phenomena due to the same physical cause.

SECOND PAPER.

FRIDAY, *3rd April* 1896.—11.30 *to* 1.30 *o'clock.*

(*Not more than* EIGHT *Questions to be attempted.*)

1. Define the term viscous as applied to a fluid, and show how viscosity may be measured. Mention various consequences of viscosity in water, and in air, as exhibited in phenomena of constant occurrence.

2. Explain the effect of relative motion of listener and source on the pitch of a musical sound. Why does not a steady wind produce a similar result? What would be the effect produced by a sudden, brief gust?

3. Point out the conditions which determine the form of the surface of water in the neighbourhood of a glass plate which dips obliquely into it. Show how its section, in the vertical plane perpendicular to the plate, is connected with the curve of flexure of a uniform wire.

4. What is meant by a Cycle of Operations, and why is it indispensable in thermodynamic reasoning? What additional advantage is gained by considering a reversible cycle?

Point out the conditions of reversibility, and show, on Watt's diagram, the general form of a reversible cycle—indicating the heat or work transactions at each stage of it.

5. Trace the pencil of rays by which a star is seen, the eye being in still water. If the star be near the horizon, at what elevation will it appear, and why?

6. Compare, and contrast, longitudinal and transverse plane waves. Mention some experiments used to determine to which class light-waves belong. Under what circumstances might these tests fail?

7. Define Thermal Conductivity, and show how the fundamental units are involved in its numerical expression.

In foot-pound-minutes Centigrade, the conductivity of iron is about 0.8. Find the number of units of heat which pass per second through each square inch of surface of an iron plate, half-an-inch thick, which separates freezing water from boiling water.

8. Compare the isothermal and adiabatic compressibilities of a gas like air—and show what correction has to be applied to the result of Newton's calculation of the speed of sound.

9. Explain, generally, the cause of the phenomenon called Mirage. When an inverted image is seen, the object being beyond the visual horizon, trace the courses, to the eye, of rays by which the upper and lower parts respectively are seen.

10. Point out carefully the reason why we have rays of light and not of sound. Explain the production of spectra by means of a diffraction grating.

11. Define the capacity of an electric conductor, and the quantity and potential of its charge, and give the consequent relation among them. Express the energy of the charge (*a*) in terms of capacity and potential, (*b*) of capacity and quantity.

12. Show how the potential of a conductor carrying a current varies from section to section.

How do we find, experimentally, points at equal potential; and how is the process employed in comparing the resistances of wires?

CHEMISTRY, } See under First Professional Examina-
ZOOLOGY, } tion for Degrees in Medicine.

BOTANY.

MONDAY, 23*rd March* 1896.—1 *to* 3 *o'clock.*

(*Illustrate your Answers by Drawings.*)

1. Write an illustrated and comparative account of the morphology of the Liliaceæ, Amaryllideæ, and Orchideæ.

2. Display a scheme for the classification of the Bryophyta, indicating your reasons for the various subdivisions you propose.

3. State what you know of mitotic division of the nucleus.

4. Write the life-history of any Fungus known to you.

5. Give an account of the influence of temperature upon plant growth.

PRACTICAL BOTANY.

WEDNESDAY, 25*th March* 1896.

1. Make a series of sections of Specimen A. Leave your preparations, and sketch them sufficiently to allow of your giving a list of explanatory references.

2. Specimen B. Mark with flag-labels all the structures visible on the surface of the Specimen.

3. Dissect Specimen 3. Lay out its parts on this paper and name them.

4. Draw the flower diagram of Specimen D.

5. Mention the natural order, giving your reasons in each case of E, F, G, H, I.

a. Root of Vanda Suavis. *b*. Leaf of Lygodium shewing sporangia. *c*. Germinating embryo of Phoenix dactylifera. *d*. Monochaetum ensiferum. *e*. Erica carnea. *f*. Scopolia carniolica. *g*. Nordmannia cordifolia. *h*. Fuchsia globosa. *i*. Cyclamen persicum. *k*. Petasites vulgaris. *l*. Stellaria media.

GEOLOGY, INCLUDING MINERALOGY.

TUESDAY, 24*th March* 1896.—1 *to* 3 *o'clock.*

1. Give some account of the formation of caves in limestone.

2. Describe the general phenomena of a violent or paroxysmal volcanic eruption.

3. Draw a section across a mountain-chain showing two periods of uplift.

4. Describe Ramsay's theory of the origin of rock-basins.

5. Give some account of the structures met with in glassy igneous rocks.

6. Describe four important rock-forming minerals, and the rocks of which they are essential constituents.

7. Under what conditions was the Wealden formation accumulated?

8. Give the general characters of Dinosauria and Pterosauria.

DEPARTMENT OF HISTORY AND LAW.

GENERAL BRITISH HISTORY.

SATURDAY, 28*th March* 1896.—12 *to* 2 *o'clock.*

(N.B.—*Not more than* SEVEN *Questions to be attempted. The Questions should be selected from different parts of the paper.*)

1. Mention the leading ecclesiastics of the Anglo-Saxon period, and give a full account of the career and work of any *one* of them.

2. Give illustrations of the fact that Norman influence was strong in England before the Norman Conquest.

3. What circumstances induced Henry II. to attempt the conquest of Ireland?

4. Write a short account of the career of Thomas of Canterbury, *or* of Simon de Montfort, and explain clearly the controversy associated with the name of the one you select.

5. What are the provisions of the Great Charter with reference to taxation, the administration of justice, and the meeting of the Great Council? How far are these an advance on previously existing rights?

6. What abuses prevailed in the Church in Henry III.'s

reign, and what attempts were made to meet these by Grosseteste, *or* by the Franciscans?

7. What are the leading events in the movement by which the English Church was separated from the Roman Catholic Church? Show that an anti-Papal tendency had existed long before in England.

8. Contrast James I.'s and Elizabeth's methods of dealing with Parliament.

9. Trace the events which led to the overthrow of Charles I.'s authority in Scotland.

10. Give an account of the proceedings of the Long Parliament during the first year of its existence.

11. State and explain the changes in the attitude of England to Holland and France in the reign of Charles II.

12. Distinguish carefully the different character of the Revolution in each of the three kingdoms.

13. Explain the full significance of the events of the Seven Years' War with reference to the expansion of England.

14. Enumerate the different coalitions formed by Pitt against France, and account for their failure.

15. What circumstances in the condition of Ireland led Wellington to give way on the question of Catholic Emancipation?

(Special Period, 1290-1509: Fortescue.)

Saturday, 28*th March* 1896.—3 *to* 5 *o'clock.*

(N.B.—*Not more than* Seven *Questions to be attempted, of which two at least must be taken from the last four in the paper.*)

1. Explain the constitution of the Model Parliament, and show how it differed from that of the Parliament of 1265.

2. What was Edward I.'s position with regard to Scotland under (*a*) the Treaty of Brigham, (*b*) Balliol's rule, (*c*) the Settlement of 1305?

3. What causes led to the appointment of the Lords

Ordainers, and what is the constitutional significance of their appointment?

4. Illustrate by any of Edward III.'s campaigns the methods of warfare prevailing in feudal times.

5. What effect had the Black Death and the Statutes of Labourers on the condition of the villeins?

6. Give an account of the Lollard movement and its suppression.

7. Give illustrations of the prosperous condition of Scotland in the reign of James IV.

8. What were the leading features of Henry VII.'s policy towards (*a*) Ireland, (*b*) foreign countries?

9. Give a brief account of the occasion, purpose, and scope of the De Laudibus. Show how it throws light on the social condition of England in the 15th century, *or* on the political philosophy of the Middle Ages.

10. What causes are assigned by Fortescue for the poverty of the king, and what remedies does he suggest?

11. Summarize Fortescue's contrast between the French and English Commons, and French and English methods of taxation.

12. Write explanatory notes on the following:—

(*a*) The Erlis of Lecestir and Glocestre, wich were the grettest lordes off Englond, rose ayenest thair kynge Herre the iij^de^, and toke hym and his sonne prisoners in the ffelde. Wich maner off demeynynge the kyng off Scottis that last dyed dredyng to be practysed in his lande, putt owt off the same lande the Erle Douglas whos livelod and myght was nerehande equivalent to his owne.

(*b*) But owre commons be riche, and therfore thai give to thair kynge, at somme tymes quinsimes and dessimes, and ofte tymes other grete subsidies, as he hath nede ffor the gode and defence off his reaume.

(*c*) Sic et Scotia, quae ei quondam ut ducatus obedivit, in regnum crevit politicum et regale.

(*d*) Nec leges ipse sine subditorum assensu mutare poterit, nec subjectum populum renitentem onerare impositionibus peregrinis.

ART AND ARCHÆOLOGY.

First Paper.—Historical.

Friday, 27*th March* 1896.—3 *to* 5 *o'clock.*

(*Not more than* Seven *Questions to be attempted.*)

1. Describe the different kinds of rude stone monument, with a special notice of some one characteristic example. What can be inferred as to the purpose of these monuments?

2. Write a note on Babylonian textiles. What idea can we form of the design of these in the Assyrian period?

Or,

Mention, with brief notes, the decorative elements used in Assyrian architecture.

3. What do you know about the so-called "Egean" or "Early Mediterranean" civilisation of about 1500 B.C.?

4. Enumerate, in chronological order, the chief masters of (*a*) the Attic, and (*b*) the Peloponnesian school of Greek sculpture, from Pheidias to Lysippus.

5. What changes in the aspect of Rome were involved in the rebuilding after the fire under Nero? Mention, with very brief notes, any six public buildings erected at Rome between the time of Nero and that of Constantine.

6. Compare and contrast the Pagan and the Christian basilica, mentioning six important examples of the latter.

7. Write brief notes on the following:—Early English leafage, Early English mouldings, Geometrical tracery.

8 What are the chief features characteristic of English Perpendicular architecture? Refer to examples.

9. Write a note on the tower and spire as architectural features, (*a*) in Italy, (*b*) in the three periods of English Gothic.

10. Mention four Italian painters remarkable for the influence they exercised over their fellows. Explain clearly in each case the nature and extent of that influence.

11. Draw up a comparative chronological table, with dates, of the chief painters of Florence and of Venice.

SECOND PAPER.—CRITICAL AND TECHNICAL.
SATURDAY, 28*th March* 1896.—9 *to* 11 *o'clock.*
(*Not more than* SEVEN *Questions to be attempted.*)

1. Discuss the reasons for and against the use of advanced pictorial design in tapestry;

Or,

Criticise, from the point of view of the logic of ornament, the decoration of Greek painted vases.

2. Contrast the Egyptian and the Greek temples, and give a brief description of the architecture of the Parthenon.

3. Comment on the use of sculpture as an integral element of Greek temple architecture.

4. Write a critical note on the style of Praxiteles, mentioning five of his principal works.

5. What parts are played respectively by the picture and by pure ornament in the decoration of mediæval MSS. of different schools and periods.

6. Describe structurally a typical French Cathedral of the 13th century, pointing out the main characteristics of Gothic construction.

7. Describe, with measurements, the Sistine Chapel, and explain the architectural scheme substituted by Michelangelo for the actual form of its upper part.

8. Give a connected view of the subjects represented by Michelangelo on the roof of the Sistine, and state how they are distributed in relation to the architectural scheme.

9. Contrast the methods of oil painting practised respectively by the early Flemings, by the Venetians, and by Rubens. What are the advantages and disadvantages of each?

10. There is a marked difference between Greek and Italian reliefs in bronze. Wherein does the difference reside, and how far can it be accounted for on technical grounds?

11. Write a note on the different ways of representing the deceased on a sepulchral monument. Quote examples of different modes of treatment from ancient and modern art.

CONSTITUTIONAL LAW AND HISTORY,
ROMAN LAW,
PUBLIC LAW,
} See Faculty of Law.

EXAMINATION PAPERS FOR DEGREE OF M.A. WITH HONOURS.

A.—CLASSICS.

LATIN PROSE.

MONDAY, 30*th March* 1896.—9 *to* 12 *o'clock.*

Some are impatient of contradiction, more willing to go wrong by their own judgment than to be indebted for a better and a safer way to the sagacity of another, inclined to consider counsel as insult, and inquiry as want of confidence, and to confer their regard on no other terms than unreserved submission and implicit compliance. Some are dark and involved, equally careful to conceal good and bad purposes; and pleased with producing effects by invisible means, and showing their design only in its execution. Others are universally communicative, alike open to every eye, and equally profuse of their own secrets and those of others, without the necessary vigilance of caution, or the honest arts of prudent integrity, ready to accuse without malice, and to betray without treachery. Any of these may be useful to the community, and pass through the world with the reputation of good purposes and uncorrupted morals, but they are unfit for close and tender intimacies. He cannot properly be chosen for a friend, whose kindness is exhaled by its own warmth, or frozen by the first blast of slander; he cannot be a useful counsellor who will hear no opinion but his own; he will not much invite confidence whose principal maxim is to suspect; nor can the candour and frankness of that man be much esteemed, who spreads his arms to human kind and makes every man without distinction a denizen of his bosom.

TUESDAY, 31*st March* 1896.—2 *to* 5 *o'clock.*

Translate, with short notes where needed to supplement translation:—

1. Tectum augustum, ingens, centum sublime columnis, urbe fuit summa, Laurentis regia Pici,

horrendum silvis et religione parentum.
hic sceptra accipere, et primos attollere fasces
regibus omen erat; hoc illis curia templum,
hae sacris sedes epulis; hic ariete caeso
perpetuis soliti patres considere mensis.
quin etiam veterum effigies ex ordine avorum
antiqua e cedro, Italusque paterque Sabinus
vitisator, curvam servans sub imagine falcem,
Saturnusque senex Janique bifrontis imago,
vestibulo adstabant aliique ab origine reges,
Martiaque ob patriam pugnando vulnera passi.
multaque praeterea sacris in postibus arma,
captivi pendent currus curvaeque secures,
et cristae capitum et portarum ingentia claustra
spiculaque clipeique ereptaque rostra carinis.
ipse Quirinali lituo parvaque sedebat
succinctus trabea laevaque ancile gerebat
Picus, equum domitor: quem capta cupidine coniunx
aurea percussum virga versumque venenis,
fecit avem Circe sparsitque coloribus alas.
tali intus templo divum patriaque Latinus
sede sedens Teucros ad sese in tecta vocavit.

2. Vel nos in Capitolium,
quo clamor vocat et turba faventium,
vel nos in mare proximum
gemmas et lapides, aurum et inutile,
summi materiem mali,
mittamus, scelerum si bene paenitet.
eradenda cupidinis
pravi sunt elementa, et tenerae nimis
mentes asperioribus
formandae studiis. Nescit equo rudis
haerere ingenuus puer,
venarique timet, ludere doctior,
seu Graeco jubeas trocho,
seu malis vetita legibus alea:
cum periura patris fides
consortem socium fallat et hospitem

indignoque pecuniam
haeredi properet. Scilicet improbae
crescunt divitiae: tamen
curtae nescio quid semper abest rei.

3. Qui sibi fidit,
dux regit examen. Parios ego primus iambos
ostendi Latio, numeros animosque secutus
Archilochi, non res et agentia verba Lycamben.
ac ne me foliis ideo brevioribus ornes
quod timui mutare modos et carminis artem,
temperat Archilochi musam pede mascula Sappho,
temperat Alcaeus, sed rebus et ordine dispar,
nec socerum quaerit quem versibus oblinat atris,
nec sponsae laqueum famoso carmine nectit.
hunc ego, non alio dictum prius ore, Latinus
volgavi fidicen. iuvat inmemorata ferentem
ingenuis oculisque legi manibusque teneri.

4. O utinam caelique deis Erebique liceret
hoc caput in cunctas damnatum exponere poenas!
devotum hostiles Decium pressere catervae:
me geminae figant acies me barbara telis
Rheni turba petat: cunctis ego pervius hastis
excipiam medius totius volnera belli.
hic redimat sanguis populos: hac caede luatur
quidquid Romani meruerunt pendere mores.
ad iuga cur faciles populi cur saeva volentes
regna pati pereunt? me solum invadite ferro,
me frustra leges et inania iura tuentem:
hic dabit hic pacem iugulus finemque laborum
gentibus Hesperiis: post me regnare volenti
non opus est bello. quin publica signa ducemque
Pompeium sequimur? nec si fortuna favebit
hunc quoque totius sibi ius promittere mundi
non bene compertum est: ideo me milite vincat
ne sibi se vicisse putet.

5. Scivi extemplo rem de compecto geri.
ne canem quidem irritatam voluit quisquam imitarier,
saltem, si non arriderent, dentes ut restringerent.

abeo ab illis, postquam video me sic ludificarier.
pergo ad alios, venio ad alios, deinde ad alios: una rest
omnes de compecto rem agunt, quasi in Velabro olearii.
item alii parasiti frustra obambulabant in foro.
nunc barbarica lege certumst ius meum omne persequi.
consilium qui iniere quo nos victu et vita prohibeant,
is diem dicam, inrogabo multam, ut mihi cenas decem
meo arbitratu dent, quom cara annona sit. sic egero.
nunc ibo ad portum hinc. est illic mi una spes cenatica;
si ea decolabit, redibo huc ad senem ad cenam asperam.

6. Sed quid ago? paene orationem in epistulam inclusi. redeo ad altercationem: surgit pulchellus puer, obicit mihi, me ad Baias fuisse. falsum, sed tamen quid huic? "Simile est" inquam "quasi dicas in operto fuisse." "quid" inquit "homini Arpinati cum aquis calidis?" "narra" inquam "patrono tuo, qui Arpinatis aquas concupivit (nosti enim marinas); "quousque" inquit "hunc regem feremus?" "regem appellas" inquam "cum Rex tui mentionem nullam fecerit?"—ille autem Regis hereditatem spe devorarat.—"domum" inquit "emisti." "putes" inquam "dicere, iudices emisti." "iuranti" inquit "tib non crediderunt." "mihi vero" inquam "xxv iudices crediderunt, xxxi, quoniam nummos ante accesserunt, tibinihil crediderunt. magnis clamoribus adflictus conticuit et concidit.

Explain the allusions.

7. Ceterum urbis quae domui supererant non, ut post Gallica incendia, nulla distinctione nec passim erecta, sed dimensis vicorum ordinibus et latis viarum spatiis cohibitaque aedificiorum altitudine ac patefactis areis additisque porticibus, quae frontem insularum protegerent. eas porticus Nero sua pecunia exstructurum purgatasque areas dominis traditurum pollicitus est. addidit praemia pro cuiusque ordine et rei familiaris copiis, finivitque tempus intra quod effectis domibus aut insulis apiscerentur. ruderi accipiendo Ostienses paludes destinabat, utique naves, quae frumentum Tiberi subvectavissent, onustae rudere decurrerent, aedificiaque ipsa certa sui parte sine trabibus saxo Gabino Albanove

solidarentur, quod is lapis ignibus impervius est; iam aqua privatorum licentia intercepta quo largior et pluribus locis in publicum flueret, custodes et subsidia reprimendis ignibus in propatulo quisque haberet; nec communione parietum, sed propriis quaeque muris ambirentur. ea ex utilitate accepta decorem quoque novae urbi adtulere. erant tamen qui crederent, veterem illam formam salubritati magis conduxisse, quoniam angustiae itinerum et altitudo tectorum non perinde solis vapore perrumperentur; at nunc patulam latitudinem et nulla umbra defensam graviore aestu ardescere.

GENERAL PAPER.

WEDNESDAY, *1st April* 1896.—2 *to* 5 *o'clock.*

I. Translate with explanatory or critical notes :—

1. nam neque adhuc Vario videor nec dicere Cinna
digna, sed argutos inter strepere anser olores.

2. sumpsisse merentes
laudabor pœnas animumque explesse iuvabit
ultricis flammae et cineres satiasse meorum.

3. hinc quoque quingentos in se Mezentius armat,
quos patre Benaco velatus arundine glauca
Mincius infesta ducebat in aequora pinu.

4. libenter hoc et omne militabitur
bellum in tuae spem gratiae,
non ut iuvencis inligata pluribus
aratra nitantur mea
neque ut superni villa candens Tusculi
Circaea tangat mœnia.

5. huc venturus erat Maecenas optimus atque
Cocceius, missi magnis de rebus uterque
legati, aversos soliti componere amicos.

6. ibant octonos referentes Idibus aeris.

7. nec minimum meruere decus vestigia Graeca
ausi deserere et celebrare domestica facta,
vel qui praetextas vel qui docuere togatas.

8. scilicet extremi Pompeium emptique clientes

continuo per tot sociabunt tempora regno?
ille reget currus nondum patientibus annis?

9. sparsos per rura colonos
redde mari Cilicas: Pharios hinc concute reges
Tigranemque meum.

10. sequere me viaticum ut dem a trapezita tibi:
eadem opera a praetore sumam syngraphum.

11. logos ridiculos vendo. age, licemini.
quis cena poscit? ecqui poscit prandio?
Herculeo stabunt prandio, cena tibi.

12. SA. set interim, strategе noster, quor hic cessat cantharus?
vide quot cuathos bibimus. ST. tot quot digiti tibi sunt in manu.
cantio Graecast: ἢ πέντ' ἢ τρία πῖν' ἢ μὴ τέτταρα.
SA. tibi propino. decumam a fonte tibi tute inde, si sapis.

Scan the first two lines of this passage and of the preceding one (No. 11).

13. portoriis Italiae sublatis, agro Campano diviso, quod vectigal superest domesticum praeter vicensimam?

14. se, quoniam ex senatus consulto provinciam haberet, lege Cornelia imperium habiturum, quoad in urbem introisset.

15. nunc redeo ad quae mihi mandas: † in praefectis excusatio iis, quos voles deferto.

16. sin mihi Caesar hoc non concedat, video tibi placere illud, me πολίτευμα de pace suscipere, in quo non extimesco periculum: cum enim tot impendeant, cur non honestissimo depecisci velim?

17. sed quaestores regibus etiam tum imperantibus instituti sunt, quod lex curiata ostendit ab L. Bruto repetita.

18. audiretur hinc Germanici filia, † indebilis rursus Burrus.

19. auxitque patrum honorem statuendo ut, qui a privatis iudicibus ad senatum provocavissent, eiusdem pecuniae periculum facerent, cuius si qui imperatorem appellarent.

II. Answer any *three* of the following:—

1. Discuss the causes which interfered with the success of the Roman operations during the First Punic War.

2. Show how the relative importance of the Senate, the Comitia, and the Magistrates was affected by the invasion of Hannibal, and by the foreign wars of the century following.

3. Give a very short account of Rome's relations with foreign states from 202 B.C. to 146 B.C.; and compare her position in the world at the end of this period with her position at the beginning of it.

4. What is Cicero's own account of his policy and aims during the years 49 and 48 B.C.? Briefly criticise his account.

5. What were the duties performed by imperial *procuratores* in the provinces in the time of Claudius? Explain any innovations made by that Emperor in connection with this office.

III. Answer any *two* of the following:—

1. What Italian elements can be discovered in the plays of Plautus? Illustrate from the *Captivi* and *Stichus*.

2. What is the attitude of Horace towards earlier Latin poets? Illustrate your answer by quotations from or references to passages in his Satires and Epistles.

3. Classify the sources of information which Tacitus used in the composition of his historical writings; and state any inferences that can be drawn from the nature of his authorities as to his historical trustworthiness.

4. What are the chief objections of Tacitus to the Imperial system, and what merits does he admit that it possesses?

THURSDAY, *2nd April* 1896.—9 *to* 12 *o'clock.*

Translate:—

1. Idem hic annus censurae initium fuit, rei a parva origine ortae, quae deinde tanto incremento aucta est, ut morum disciplinaeque Romanae penes eam regimen, senatus equitumque centuriis decoris dedecorisque discrimen sub dicione eius magistratus, ius publicorum

privatorumque locorum, vectigalia populi Romani sub nutu atque arbitrio eius essent. ortum autem initium est rei, quod in populo per multos annos incenso neque differri census poterat, neque consulibus, cum tot populorum bella imminerent, operae erat id negotium agere. mentio inlata ab senatu est rem operosam ac minime consularem suo proprio magistratu egere, cui scribarum ministerium custodiaeque tabularum cura, cui arbitrium formulae censendi subiceretur. et patres quamquam rem parvam, tamen, quo plures patricii magistratus in re publica essent, laeti accepere, id, quod evenit, futurum, credo, etiam rati, ut mox opes eorum, qui praeessent, ipsi honori ius maiestatemque adicerent, et tribuni, id quod tunc erat, magis necessarii quam speciosi ministerii procurationem intuentes, ne in parvis quoque rebus incommode adversarentur, haud sane tetendere. cum a primoribus civitatis spretus honor esset, Papirium Semproniumque, quorum de consulatu dubitatur, ut eo magistratu parum solidum consulatum explerent, censui agendo populus suffragiis praefecit. censores ab re appellati sunt.

2. Atque ea nimirum quaecumque Acherunte profundo
prodita sunt esse, in vita sunt omnia nobis.
nec miser impendens magnum timet aere saxum
Tantalus, ut famast, cassa formidine torpens;
sed magis in vita divom metus urget inanis
mortalis casumque timent quem cuique ferat fors.
nec Tityon volucres ineunt Acherunte iacentem
nec quod sub magno scrutentur pectore quicquam
perpetuam aetatem possunt reperire profecto.
sed Tityos nobis hic est, in amore iacentem
quem volucres lacerant atque exest anxius angor
aut alia quavis scindunt cuppedine curae.
Sisyphus in vita quoque nobis ante oculos est
qui petere a populo fasces saevasque secures
imbibit et semper victus tristisque recedit.
nam petere imperium quod inanest nec datur umquam,
atque in eo semper durum sufferre laborem,
hoc est adverso nixantem trudere monte

saxum quod tamen e summo iam vertice rusum
volvitur et plani raptim petit aequora campi.
deinde animi ingratam naturam pascere semper
atque explere bonis rebus satiareque numquam,
quod faciunt nobis annorum tempora, circum
cum redeunt fetusque ferunt variosque lepores,
nec tamen explemur vitai fructibus umquam,
hoc, ut opinor, id est, aevo florente puellas
quod memorant laticem pertusum congerere in vas,
quod tamen expleri nulla ratione potestur.

3. Contra evenit in his morbis, quibus adficiuntur animi: quo quis peius habet, minus sentit. non est quod mireris, Lucili carissime. nam qui leviter dormit, et species secundum quietem capit et aliquando dormire se dormiens cogitat: gravis sopor etiam somnia exstinguit animumque altius mergit, utique nullo intellectu sui est. quare vitia sua nemo confitetur? quia etiam nunc in illis est: somnium narrare vigilantis est et vitia sua confiteri sanitatis indicium est. expergiscamur ergo, ut errores nostros coarguere possimus. sola autem nos philosophia excitabit, sola somnum excutiet gravem: illi te totum dedica. dignus illa es, illa digna te est: ite in complexum alter alterius. omnibus aliis rebus te nega, fortiter, aperte. non est quod precario philosopheris. si aeger esses, curam intermisisses rei familiaris et forensia tibi negotia excidissent nec quemquam tanti putares, cui advocatus in remissione descenderes. toto animo id ageres, ut quam primum morbo liberareris: quid ergo? non et nunc idem facias? omnia impedimenta dimitte et vaca bonae menti: nemo ad illam pervenit occupatus. exercet philosophia regnum suum: dat tempus, non accipit. non est res subsiciva: ordinaria est, domina est, adest et iubet.

4. Nec desunt regni comites: 'sine, moenia pulset
inritus.' 'ille autem fractis huc audeat usque
viribus?' 'hic miseris furor est instare periclo,
nec librare metus et tuta odisse.' 'resiste
hic fretus solio, nos propulsabimus hostem,
nos bellare iube.' sic proxima turba, sed ardens

ecce aderat luctu dicturusque omnia belli
libertate Creon: urit fera corda Menœceus;
nulla patri requies, illum quaeritque tenetque:
illum sanguineos proflantem pectore rivos
aspicit et saeva semper de turre cadentem.
ut dubium et pugnas cunctantem Eteoclea vidit:
'ibis' ait 'neque te ulterius fratremque ducemque,
pessime, funeribus patriae lacrimisque potentem,
Eumenidum bellique reum, patiemur inulti.
sat tua non aequis luimus periuria divis.
urbem armis opibusque gravem et modo civibus artam,
ceu caelo demissa lues inimicave tellus,
hausisti vacuamque tamen sublimis obumbras?
deest servitio plebes: hos ignis egentes
fert humus, hos pelago patrius iam detulit amnis;
hi quaerunt artus, illi anxia vulnera curant.
redde agedum miseris fratres natosque patresque,
redde arvis domibusque viros! ubi maximus Hypseus
finitimusque Dryas? ubi Phocidos arma sonorae
Euboicique duces? illos tamen aequa duelli
sors tulit ad manes: at tu, pudet! hostia regni,
hostia, nate, iaces.'

GREEK.

MONDAY, 30*th March* 1896.—2 *to* 5 *o'clock.*

Translate with brief notes where needed to supplement translation:—

1. Πηλείδης δ' ἐτέρωθεν ἐναντίον ὦρτο λέων ὡς
σίντης, ὅν τε καὶ ἄνδρες ἀποκτάμεναι μεμάασιν
ἀγρόμενοι πᾶς δῆμος· ὁ δὲ πρῶτον μὲν ἀτίζων
ἔρχεται, ἀλλ' ὅτε κέν τις ἀρηιθόων αἰζηῶν
δουρὶ βάλῃ, ἐάλη τε χανών, περί τ' ἀφρὸς ὀδόντας
γίγνεται, ἐν δέ τέ οἱ κραδίῃ στένει ἄλκιμον ἦτορ,
οὐρῇ δὲ πλευράς τε καὶ ἰσχία ἀμφοτέρωθεν
μαστίεται, ἐὲ δ' αὐτὸν ἐποτρύνει μαχέσασθαι,
γλαυκιόων δ' ἰθὺς φέρεται μένει, ἤν τινα πέφνῃ
ἀνδρῶν ἠ αὐτὸς φθίεται πρώτῳ ἐν ὁμίλῳ·

ὣς Ἀχιλῆ᾽ ὤτρυνε μένος καὶ θυμὸς ἀγήνωρ
ἀντίον ἐλθέμεναι μεγαλήτορος Αἰνείαο.
οἱ δ᾽ ὅτε δὴ σχεδὸν ἦσαν ἐπ᾽ ἀλλήλοισιν ἰόντες,
τὸν πρότερος προσέειπε ποδάρκης δῖος Ἀχιλλεύς·
" Αἰνεία, τί σὺ τόσσον ὁμίλου πολλὸν ἐπελθὼν
ἕστης; ἦ σέ γε θυμὸς ἐμοὶ μαχέσασθαι ἀνώγει
ἐλπόμενον Τρώεσσιν ἀνάξειν ἱπποδάμοισιν
τιμῆς τῆς Πριάμου; ἀτὰρ εἴ κεν ἐμ᾽ ἐξεναρίζῃς,
οὔ τοι τοὔνεκά γε Πρίαμος γέρας ἐν χερὶ θήσει·
εἰσὶν γάρ οἱ παῖδες, ὁ δ᾽ ἔμπεδος οὐδ᾽ ἀεσίφρων.

Write a note on the construction of ὁμίλου and τιμῆς, and on the meaning of ἐάλη and ἀεσίφρων.

2. ΦΕΙ. ὁ Σόλων ὁ παλαιὸς ἦν φιλόβημος τὴν φύσιν.
ΣΤΡ. τουτὶ μὲν οὐδέν πω πρὸς ἕνην τε καὶ νέαν.
ΦΕΙ. ἐκεῖνος οὖν τὴν κλῆσιν εἰς δύ᾽ ἡμέρας
ἔθηκεν, εἷς γε τὴν ἕνην τε καὶ νέαν,
ἵν᾽ αἱ θέσεις γίγνοιντο τῇ νουμηνίᾳ.
ΣΤΡ. ἵνα δὴ τί τὴν ἕνην προσέθηκεν; ΦΕΙ. ἵν᾽, ὦ μέλε,
παρόντες οἱ φεύγοντες ἡμέρᾳ μιᾷ
πρότερον ἀπαλλάττοιν᾽ ἐκόντες, εἰ δὲ μή,
ἔωθεν ὑπανιῷντο τῇ νουμηνίᾳ.
ΣΤΡ. πῶς οὐ δέχονται δῆτα τῇ νουμηνίᾳ
ἀρχαὶ τὰ πρυτανεῖ᾽, ἀλλ᾽ ἕνῃ τε καὶ νέᾳ;
ΦΕΙ. ὅπερ οἱ προτένθαι γὰρ δοκοῦσί μοι παθεῖν·
ὅπως τάχιστα τὰ πρυτανεῖ᾽ ὑφελοίατο,
διὰ τοῦτο προὐτένθευσαν ἡμέρᾳ μιᾷ.
ΣΤΡ. εὖ γ᾽, ὦ κακοδαίμονες, τί κάθησθ᾽ ἀβέλτεροι,
ἡμέτερα κέρδη τῶν σοφῶν ὄντες, λίθοι,
ἀριθμός, πρόβατ᾽ ἄλλως, ἀμφορῆς νενησμένοι.

Explain this.

3. εὐθημεῖν χρὴ καὶξίστασθαι τοῖς ἡμετέροισι χοροῖσιν
ὅστις ἄπειρος τοιῶνδε λόγων, ἢ γνώμῃ μὴ καθαρεύει,
ἢ γενναίων ὄργια Μουσῶν μήτ᾽ εἶδεν μήτ᾽ ἐχόρευσεν,
μηδὲ Κρατίνου τοῦ ταυροφάγου γλώττης βακχεῖ᾽ ἐτελέσθη,
ἢ βωμολόχοις ἔπεσιν χαίρει, μὴ ᾽ν καιρῷ τοῦτο ποιοῦσιν,
ἢ στάσιν ἐχθρὰν μὴ καταλύει, μηδ᾽ εὔκολός ἐστι πολίταις,
ἀλλ᾽ ἀνεγείρει καὶ ῥιπίζει, κερδῶν ἰδίων ἐπιθυμῶν,
ἢ τῆς πόλεως χειμαζομένης ἄρχων καταδῳροδοκεῖται,

ἢ προδίδωσιν φρούριον ἢ ναῦς, ἢ τἀπόρρητ' ἀποπέμπει
ἐξ Αἰγίνης Θωρυκίων ὢν, εἰκοστολόγος κακοδαίμων.

4. εἶδον, ναὶ τὸν Πᾶνα, τὸ ποίμνιον ἀνίκ' ἔβαλλε,
κοὔ μ' ἔλαθ', οὐ τὸν ἐμὸν τὸν ἕνα γλυκύν, ᾧ ποθορῶμι
ἐς τέλος· αὐτὰρ ὁ μάντις ὁ Τήλεμος, ἔχθρ' ἀγορεύων,
ἐχθρὰ φέροιτο ποτ' οἶκον, ὅπως τεκέεσσι φυλάξῃ.
ἀλλὰ καὶ αὐτὸς ἐγὼ κνίσδων πάλιν οὐ ποθόρημι,
ἀλλ' ἄλλαν τινὰ φαμὶ γυναῖκ' ἔχειν· ἁ δ' ἀτοισα
ζαλοῖ μ', ὦ Παιάν, καὶ τάκεται· ἐκ δὲ θαλάσσας
οἰστρεῖ παπταίνοισα ποτ' ἄντρα τε καὶ ποτὶ ποίμνας.
σίξα δ' ὑλακτεῖν νιν καὶ τᾷ κυνί· καὶ γὰρ ὄκ' ἦρων
αὐτᾶς, ἐκνυζῆτο ποτ' ἰσχία ῥύγχος ἔχοισα.
ταῦτα δ' ἴσως ἐσορεῦσα ποιεῦντά με πολλάκι πεμψεῖ
ἄγγελον. αὐτὰρ ἐγὼ κλαξῶ θύρας, ἔστε κ' ὀμόσσῃ
αὐτά μοι στορέσειν καλὰ δέμνια τᾶσδ' ἐπὶ νάσῳ.
καὶ γάρ θην οὐδ' εἶδος ἔχω κακόν, ὥς με λέγοντι.
ἦ γὰρ πρὰν ἐς πόντον ἐσέβλεπον, ἦς δὲ γαλάνα,
καὶ καλὰ μὲν τὰ γένεια, καλὰ δ' ἐμὶν ἁ μία κώρα,
ὡς παρ' ἐμὶν κέκριται, κατεφαίνετο· τῶν δέ τ' ὀδόντων
λευκοτέραν αὐγὰν Παρίας ὑπέφαινε λίθοιο.
ὡς μὴ βασκανθῶ δέ, τρὶς εἰς ἐμὸν ἔπτυσα κόλπον.

5. ἐὰν δέ γε, οἶμαι, φύσιν ἱκανὴν γένηται ἔχων ἀνήρ, πάντα ταῦτα ἀποσεισάμενος καὶ διαῤῥήξας καὶ διαφυγών, καταπατήσας τὰ ἡμέτερα γράμματα καὶ μαγγανεύματα καὶ ἐπῳδὰς καὶ νόμους τοὺς παρὰ φύσιν ἅπαντας, ἐπαναστὰς ἀνεφάνη δεσπότης ἡμέτερος ὁ δοῦλος, καὶ ἐνταῦθα ἐξέλαμψε τὸ τῆς φύσεως δίκαιον. δοκεῖ δέ μοι καὶ Πίνδαρος ἅπερ ἐγὼ λέγω ἐνδείκνυσθαι ἐν τῷ ἄσματι ἐν ᾧ λέγει ὅτι Νόμος ὁ πάντων βασιλεὺς θνατῶν τε καὶ ἀθανάτων· οὗτος δὲ δή, φησίν, ἄγει δικαιῶν τὸ βιαιότατον ὑπερτάτᾳ χερί· τεκμαίρομαι ἔργοισιν Ἡρακλέος, ἐπεὶ ἀπριάτας—λέγει οὕτω πως· τὸ γὰρ ἆσμα οὐκ ἐπίσταμαι. λέγει δ' ὅτι οὔτε πριάμενος οὔτε δόντος τοῦ Γηρυόνου ἠλάσατο τας βοῦς, ὡς τούτου ὄντος τοῦ δικαίου φύσει, καὶ βοῦς καὶ τἆλλα κτήματα εἶναι πάντα τοῦ βελτίονός τε καὶ κρείττονος τὰ τῶν χειρόνων τε καὶ ἥττόνων.

What is the drift of the argument? and of the quotation?

6. δεῖ γὰρ ἄνθρωπον ξυνιέναι κατ' εἶδος λεγόμενον, ἐκ πολλῶν ἰόντ' αἰσθήσεων εἰς ἓν λογισμῷ ξυναιρούμενον· τοῦτο δέ ἐστιν ἀνάμνησις ἐκείνων, ἃ ποτ' εἶδεν ἡμῶν ἡ ψυχὴ συμπορευθεῖσα θεῷ καὶ ὑπεριδοῦσα

ἃ νῦν εἶναί φαμεν, καὶ ἀνακύψασα εἰς τὸ ὂν ὄντως. διὸ δὴ δικαίως μόνη πτεροῦται ἡ τοῦ φιλοσόφου διάνοια· πρὸς γὰρ ἐκείνοις ἀεί ἐστι μνήμῃ κατὰ δύναμιν, πρὸς οἵσπερ θεὸς ὢν θεῖός ἐστι. τοῖς δὲ δὴ τοιούτοις ἀνὴρ ὑπομνήμασιν ὀρθῶς χρώμενος, τελέους ἀεὶ τελετὰς τελούμενος, τέλεος ὄντως μόνος γίγνεται· ἐξιστάμενος δὲ τῶν ἀνθρωπίνων σπουδασμάτων καὶ πρὸς τῷ θείῳ γιγνόμενος νουθετεῖται μὲν ὑπὸ τῶν πολλῶν ὡς παρακινῶν, ἐνθουσιάζων δὲ λέληθε τοὺς πολλούς.

Ἔστι δὴ οὖν δεῦρο ὁ πᾶς ἥκων λόγος περὶ τῆς τετάρτης μανίας, ἣν ὅταν τὸ τῇδέ τις ὁρῶν κάλλος, τοῦ ἀληθοῦς ἀναμιμνησκόμενος, πτερῶταί τε καὶ [ἀναπτερούμενος] προθυμούμενος ἀναπτέσθαι, ἀδυνατῶν δέ, ὄρνιθος δίκην βλέπων ἄνω, τῶν κάτω δὲ ἀμελῶν, αἰτίαν ἔχει ὡς μανικῶς διακείμενος· ὡς ἄρα αὕτη πασῶν τῶν ἐνθουσιάσεων ἀρίστη τε καὶ ἐξ ἀρίστων τῷ τε ἔχοντι καὶ τῷ κοινωνοῦντι αὐτῆς γίγνεται, καὶ ὅτι ταύτης μετέχων τῆς μανίας ὁ ἐρῶν τῶν καλῶν ἐραστὴς καλεῖται.

7. ἀναγνώρισις δὲ ὥσπερ καὶ τοὔνομα σημαίνει ἐξ ἀγνοίας εἰς γνῶσιν μεταβολὴ ἢ εἰς φιλίαν ἢ εἰς ἔχθραν τῶν πρὸς εὐτυχίαν ἢ δυστυχίαν ὡρισμένων, καλλίστη δὲ ἀναγνώρισις, ὅταν ἅμα περιπέτειαι γίνωνται, οἷον ἔχει ἡ ἐν τῷ Οἰδίποδι. εἰσὶν μὲν οὖν καὶ ἄλλαι ἀναγνωρίσεις· καὶ γὰρ πρὸς ἄψυχα καὶ τὰ τυχόντα ἔστιν, * * ὥσπερ εἴρηται συμβαίνει, καὶ εἰ πέπραγέ τις ἢ μὴ πέπραγεν ἔστιν ἀναγνώρισαι· ἀλλ' ἡ μάλιστα τοῦ μύθου καὶ ἡ μάλιστα τῆς πράξεως ἡ εἰρημένη ἐστίν· ἡ γὰρ τοιαύτη ἀναγνώρισις καὶ περιπέτεια ἢ ἔλεον ἕξει ἢ φόβον, οἷων πράξεων ἡ τραγῳδία μίμησις ὑπόκειται, ἔτι δὲ καὶ τὸ ἀτυχεῖν καὶ τὸ εὐτυχεῖν ἐπὶ τῶν τοιούτων συμβήσεται. ἐπεὶ δὴ ἡ ἀναγνώρισις τινῶν ἐστιν ἀναγνώρισις, αἱ μὲν θατέρου πρὸς τὸν ἕτερον μόνον, ὅταν ᾖ ὁ ἕτερος τίς ἐστιν, ὁτὲ δὲ ἀμφοτέρους δεῖ ἀναγνωρίσαι, οἷον ἡ μὲν Ἰφιγένεια τῷ Ὀρέστῃ ἀνεγνωρίσθη ἐκ τῆς πέμψεως τῆς ἐπιστολῆς, ἐκείνῳ δὲ πρὸς τὴν Ἰφιγένειαν ἄλλης ἔδει ἀναγνωρίσεως.

Correct the text (Vahlen's) where you think necessary.

GREEK PROSE.

TUESDAY, 31*st March* 1896.—9 *to* 12 *o'clock.*

It is not erudition that makes the intellectual man, but a sort of virtue which delights in vigorous and beautiful

thinking, just as moral virtue delights in vigorous and beautiful conduct. Intellectual living is not so much an accomplishment as a state or condition of the mind in which it seeks earnestly for the highest and purest truth. It is the continual exercise of a firmly noble choice between the larger truth and the lesser, between that which is perfectly just and that which falls a little short of justice. The ideal life would be to choose thus firmly and delicately always, yet if we often blunder and fail for want of perfect wisdom and clear light, have we not the inward assurance that our aspiration has not been all in vain, that it has brought us a little nearer to the Supreme Intellect whose effulgence draws us whilst it dazzles? Here is the true secret of that fascination which belongs to intellectual pursuits, that they reveal to us a little more, and yet a little more, of the eternal order of the Universe, establishing us so firmly in what is known, that we acquire an unshakable confidence in the laws which govern what is not, and never can be, known.—P. G. Hamerton.

UNSEEN TRANSLATIONS.

Wednesday, 1*st April* 1896.—9 *to* 12 *o'clock.*

Translate :—

I.

ἀλλ' ἐπεὶ οὖν τοι θυμὸς ἐπιθύει κιθαρίζειν,
μέλπεο καὶ κιθάριζε, καὶ ἀγλαΐας ἀλέγυνε
δέγμενος ἐξ ἐμέθεν—σὺ δέ μοι, φίλε, κῦδος ὄπαζε—
εὔμολπον μετὰ χερσὶν ἔχων λιγύφωνον ἑταίρην,
καλὰ καὶ εὖ κατὰ κόσμον ἐπισταμένην ἀγορεύειν·
εὔκηλος μὲν ἔπειτα φέρειν ἐς δαῖτα θάλειαν,
καὶ χορὸν ἱμερόεντα, καὶ ἐς φιλοκυδέα κῶμον,
εὐφροσύνην νυκτός τε καὶ ἤματος. ὃς γὰρ ἂν αὐτὴν
τέχνῃ καὶ σοφίῃ δεδαημένος ἐξερεείνῃ,
φθεγγομένη παντοῖα νόῳ χαρίεντα διδάσκει,
ῥεῖα συνηθείῃσιν ἀθυρομένη μαλακῇσιν,
ἐργασίην φεύγουσα δυήπαθον· ὃς δέ κεν αὐτὴν
νῆις ἐὼν τὸ πρῶτον ἐπιζαφελῶς ἐρεείνῃ,
μᾶψ αὔτως κεν ἔπειτα μετήορά τε θρυλλίζοι,

σοὶ δ' αὐτάγρετόν ἐστι δαήμεναι, ὅττι μενοινᾷς
καὶ τοι ἐγὼ δώσω ταύτην, Διὸς ἀγλαὲ κοῦρε·
ἡμεῖς δ' αὖτ' ὄρεός τε καὶ ἱπποβότου πεδίοιο
βουσὶ νομούς, Ἑκάεργε, νομεύσομεν ἀγραύλοισιν.
ἔνθεν ἄλις τέξουσι βόες ταύροισι μιγεῖσαι
μίγδην θηλείας τε καὶ ἄρσενας· οὐδέ τί σε χρή,
κερδαλέον περ ἐόντα, περιζαμενῶς κεχολῶσθαι.

Homeric Hymn to Hermes (iii.), 475-495.

II. ET. ὑμᾶς ἐρωτῶ, θρέμματ' οὐκ ἀνασχετὰ,
ἢ ταῦτ' ἄριστα καὶ πόλει σωτήρια,
στρατῷ τε θάρσος τῷδε πυργηρουμένῳ,
βρέτη πεσούσας πρὸς πολισσούχων θεῶν
αὔειν, λακάζειν, σωφρόνων μισήματα;
μήτ' ἐν κακοῖσι μήτ' ἐν εὐεστοῖ φίλῃ
ξύνοικος εἴην τῷ γυναικείῳ γένει.
κρατοῦσα μὲν γὰρ οὐχ ὁμιλητὸν θράσος,
δείσασα δ' οἴκῳ καὶ πόλει πλέον κακόν.
καὶ νῦν πολίταις τάσδε διαδρόμους φυγὰς
θεῖσαι διερροθήσατ' ἄψυχον κάκην·
τὰ τῶν θύραθεν δ' ὡς ἄριστ' ὀφέλλεται,
αὐτοὶ δ' ὑφ' αὑτῶν ἔνδοθεν πορθούμεθα.
τοιαυτα τἂν γυναιξὶ συνναίων ἔχοις.
κεἰ μή τις ἀρχῆς τῆς ἐμῆς ἀκούσεται,
ἀνὴρ γυνή τε χὤ τι τῶν μεταίχμιον,
ψῆφος κατ' αὐτῶν ὀλεθρία βουλεύσεται,
λευστῆρα δήμου δ' οὔ τι μὴ φύγῃ μόρον.
μέλει γὰρ ἀνδρὶ, μὴ γυνὴ βουλευέτω,
τἄξωθεν· ἔνδον δ' οὖσα μὴ βλάβην τιθῇ.

ÆSCH., *Thebans*, 182-201.

III. Ξυνιόντων δ' ἔτι Ἄγις ὁ βασιλεὺς τοιόνδε ἐβουλεύσατο δρᾶσαι. τὰ στρατόπεδα ποιεῖ μὲν καὶ ἅπαντα τοῦτο, ἐπὶ τὰ δεξιὰ κέρατα αὐτῶν ἐν ταῖς ξυνόδοις μᾶλλον ἐξωθεῖται, καὶ περίσχουσι κατὰ τὸ τῶν ἐναντίων εὐώνυμον ἀμφότεροι τῷ δεξιῷ, διὰ τὸ φοβουμένους προστέλλειν τὰ γυμνὰ ἕκαστον ὡς μάλιστα τῇ τοῦ ἐν δεξιᾷ παρατεταγμένου ἀσπίδι, καὶ νομίζειν τὴν πυκνότητα τῆς ξυγκλήσεως εὐσκεπαστότατον εἶναι· καὶ ἡγεῖται μὲν τῆς αἰτίας ταύτης ὁ πρωτοστάτης τοῦ δεξιοῦ κέρως, προθυμούμενος ἐξαλλάσσειν ἀεὶ τῶν ἐναντίων τὴν ἑαυτοῦ γύμνωσιν, ἕπονται δὲ διὰ τὸν αὐτὸν φόβον καὶ οἱ ἄλλοι. καὶ τότε περιέσχον μὲν οἱ Μαντινῆς πολὺ τῷ κέρᾳ τῶν Σκιριτῶν, ἔτι δὲ πλέον οἱ Λακεδαιμόνιοι καὶ Τεγεᾶται τῶν Ἀθηναίων,

ὅσῳ μεῖζον τὸ στράτευμα εἶχον. δείσας δὲ Ἀγις μὴ σφῶν κυκλωθῇ τὸ εὐώνυμον, καὶ νομίσας ἄγαν περιέχειν τοὺς Μαντινέας, τοῖς μὲν Σκιρίταις καὶ Βρασιδείοις ἐσήμηνεν ἐπεξαγαγόντας ἀπὸ σφῶν ἐξισῶσαι τοῖς Μαντινεῦσιν, ἐς δὲ τὸ διάκενον τοῦτο παρήγγελλεν ἀπὸ τοῦ δεξιοῦ κέρως δύο λόχους τῶν πολεμάρχων Ἱππονοΐδα καὶ Ἀριστοκλεῖ ἔχουσι παρελθεῖν καὶ ἐσβαλόντας πληρῶσαι, νομίζων τῷ θ' ἑαυτῶν δεξιῷ ἔτι περιουσίαν ἔσεσθαι καὶ τὸ κατὰ τοὺς Μαντινέας βεβαιότερον τετάξεσθαι.

THUC., v. 71.

IV. τοῦ ἐξελθόντος μηνὸς, ὦ ἄνδρες Ἀθηναῖοι, ἐπειδὴ ἔμελλον εἰσιέναι τὴν δίκην, ἤδη τῶν δικαστηρίων ἐπικεκληρωμένων, προσελθὼν καὶ περιστήσας τοὺς μεθ' ἑαυτοῦ, τὸ ἐργαστήριον τῶν συνεστώτων, πρᾶγμα ποιεῖ πάνδεινον· ἀναγιγνώσκει μοι πρόκλησιν μακρὰν, ἀξιῶν, ὅν φησιν οἰκέτην ταῦτα συνειδέναι, βασανίζεσθαι, κἂν μὲν ᾖ ταῦτ' ἀληθῆ, τὴν δίκην ἀτίμητον ὀφλεῖν αὐτῷ, ἐὰν δὲ ψευδῆ, τὸν βασανιστὴν Μνησικλέα ἐπιγνώμονα εἶναι τῆς τιμῆς τοῦ παιδός. λαβὼν δ' ἐγγυητὰς τούτων παρ' ἐμοῦ, καὶ σημηναμένου τὴν πρόκλησιν ἐμοῦ, οὐχ ὡς δίκαιον ὄν· ποῦ γάρ ἐστι δίκαιον ἐν οἰκέτου σώματι καὶ ψυχῇ ἢ δύο ὠφληκέναι τάλαντα ἢ μηδὲν τὸν συκοφαντοῦντα ζημιοῦσθαι; ἀλλ' ἐγὼ πολλῷ τῷ δικαίῳ περιεῖναι βουλόμενος συνεχώρουν. καὶ μετὰ ταῦτα προσκαλεῖται μέν με τὴν δίκην πάλιν, ἐπειδὴ θᾶττον ἀνείλετο τὰς παρακαταβολάς· οὕτως εὐθὺς ἦν ὅλος οὐδ' οἷς αὐτὸς ὡρίσατο ἐμμένων δικαίοις. ἐπειδὴ δ' ἤκομεν πρὸς τὸν βασανιστὴν, ἀντὶ τοῦ τὴν πρόκλησιν ἀνοίξας δεῖξαι τὰ γεγραμμένα καὶ κατὰ ταῦτα πράττειν ὅ τι δόξαι (διὰ γὰρ τὸν θόρυβον τὸν τότε καὶ τὸ μέλλειν καλεῖσθαι τὴν δίκην τοιοῦτον ἦν· προκαλουμαί σε ταυτί· δέχομαι· φέρε δὴ τὸν δακτύλιον· λαβέ· τίς δ' ἐγγυητής; οὑτοσί· οὐδὲν οὔτ' ἀντίγραφον οὔτ' ἄλλο οὐδὲν ἐποιησάμην τοιοῦτον) ἀντὶ δὲ τοῦ ταῦθ' οὕτως ὥσπερ λέγω πράττειν ἑτέραν ἦκεν ἔχων πρόκλησιν, ἀξιῶν αὐτὸς βασανίζειν τὸν ἄνθρωπον, καὶ ἐπιλαβόμενος εἵλκε, καὶ ἐνέλειπεν οὐδὲν ἀσελγείας. καὶ ἔγωγ' ἐνεθυμήθην, ὦ ἄνδρες δικασταί, ἠλίκον ἐστὶ πλεονέκτημα τὸ μὴ καταπεπλῆχθαι τὸν βίον. ἐγὼ γὰρ ἐμαυτῷ ταῦτα πάσχειν ἐδόκουν καταφρονούμενος τῷ ἁπλῶς καὶ ὡς πέφυκα ζῆν, καὶ δίκην διδόναι παμμεγέθη ταῦτ' ἀνεχόμενος· ὅτι δ' οὖν ἠναγκαζόμην, παρ' ἃ ἡγούμην δίκαια εἶναι, ἀντιπροκαλεῖσθαι, καὶ τὸν οἰκέτην παρεδίδουν.

DEM., *Pantaenet* (xxxviii.), 39-43.

THURSDAY, *2nd April* 1896.—2 *to* 5 *o'clock.*

I. Translate the following passages, with short notes illustrative of Homeric syntax :—

(*a*) Αἴας δ' ὁρμηθέντος ὁρέξατο δουρὶ φαεινῷ
Ἕκτορος· ἀλλ' οὔ πῃ χροὸς εἴσατο.

(*b*) ἄλλου δ' οὔ τευ οἶδα, τεῦ ἂν κλυτὰ τεύχεα δύω.

(*c*) μὴ δή πω ὑπ' ὄχεσφι λυώμεθα μώνυχας ἵππους,
ἀλλ' αὐτοῖς ἵπποισι καὶ ἅρμασιν ἆσσον ἰόντες
Πάτροκλον κλαίωμεν· ὃ γὰρ γέρας ἐστὶ θανόντων.

(*d*) πάλαι πεπρωμένον αἴσῃ.

(*e*) περὶ γὰρ δίε μή μιν Ἀχαιοὶ
ἀργαλέου πρὸ φόβοιο ἕλωρ δηίοισι λίποιεν.

(*f*) Πάτροκλ', ἦ που ἔφησθα πόλιν κεραϊζέμεν ἀμήν,
Τρωιάδας δὲ γυναῖκας, ἐλεύθερον ἦμαρ ἀπούρας,
ἄξειν ἐν νήεσσι.

(*g*) Πατρόκλῳ ἥρωι κόμην ὀπάσαιμι φέρεσθαι.

II. Translate with short notes on syntax :—

(*a*) τάχα δ' ἂν διὰ τὸν χθιζινὸν ἄνθρωπον, ὃς ἡμᾶς διεδύετ'
ἐξαπατῶν καὶ λέγων
ὡς φιλαθήναιος ἦν καὶ
τὰν Σάμῳ πρῶτος κατείποι,
διὰ τοῦτ' ὀδυνηθεὶς
εἶτ' ἴσως κεῖται πυρέττων.

(*b*) ἔσθ' ὅπως ἂν ἐκ μάχης καὶ τῆς κατοξείας βοῆς
ἐς λόγους ἔλθοιμεν.
MSS. ἀνεύ, ἔλθοιμεν, *al.* ἐλθωμεν.

(*c*) σύριγγ', ἂν ἐποίησα, καλὰν ἐχὼ ἐννεάφωνον,
λευκὸν καρὸν ἔχοισαν, ἴσον κάτω, ἴσον ἄνωθεν·
ταύταν κατθείην.

(*d*) ἔχω δέ τοι οὐδ' ὅσον ὥραν
χείματος, ἢ νωδὸς καρύων, ἀμύλοιο παρόντος.

(*e*) ἐγὼ δὲ τίνων εἰμί ; τῶν ἠδέως μὲν ἂν ἐλεγχθέντων, εἴ τι μὴ ἀληθὲς λέγω, ἡδέως δ' ἂν ἐλεγξάντωσ, εἴ τίς τι μὴ ἀληθὲς λέγοι, οὐκ ἀηδέστερον μέντ' ἂν ἐλεγχθέντων ἢ ἐλεγξάντων.

(*f*) ἀποθάνοις ἄν, εἰ βούλοιτο θανάτου σοι τιμᾶσθαι.

(*g*) ἥ τε γὰρ πλάτανος αὕτη μάλ' ἀμφιλαφής τε καὶ ὑψηλή, τοῦ τε ἄγνου τὸ ὕψος καὶ τὸ σύσκιον πάγκαλον, καὶ ὡς ἀκμὴν ἔχει τῆς ἄνθης, ὡς ἂν εὐωδέστατον παρέχοι τὸν τόπον.

III. Write short critical notes on :—

(*a*) καὶ μὴν ἡμεῖς ἐπιθυμοῦμεν
παρὰ σοφοῖν ἀνδροῖν ἀκοῦσαί τινα λόγων ἐμμέλειαν,
ἔπιτε δαῖμον ὁδόν.

(*b*) ἐχάρην γουν, ἡνίκ' ἤκουσα περὶ Δαρείου τεθνεῶτος.

(*c*) τοιόνδ' εὑρόντες ἀλεξίκακον τῆς χώρας τῆσδε καθαρτήν,
πέρυσιν καταπρούδοτε καινοτάταις σπαίρανθ' αὐτὸν διανοίαις.
MSS. σπείρανθ' : *al.* σπαίρουθ' :

(*d*) ὡς αὐτῷ κατὰ θυμὸν ὁ παῖς πεπονημένος εἴη,
αὐτῷ δ' εὖ ἔλκων ἐς ἀλαθινὸν ἄνδρ' ἀποβαίη.

(*e*) ἀλλ' ἴσος γὰρ ὁ μόχθος, ἐπ' ᾠόνι κύματα μετρεῖν.

Comment also on the scansion.

IV. Translate with short explanatory notes :—

(*a*) τοὶ δ' ἔριδος κρατερῆς καὶ ὁμοίου πολέμοιο
πεῖραρ ἐπαλλάξαντες ἐπ' ἀμφοτέροισι τάνυσσαν.

(*b*) Αἰνεία, πῶς ἂν καὶ ὑπὲρ θεὸν εἰρύσσαισθε
Ἴλιον αἰπεινήν ; ὡς δὴ ἴδον ἀνέρας ἄλλους,
κάρτεΐ τε σθένεΐ τε πεποιθότας ἠνορέῃ τε
πλήθεΐ τε σφετέρῳ, καὶ ὑπερδέα δῆμον ἔχοντας.

(*c*) τὴν γῆν ὅταν νομίσωσι τὴν τῶν πολεμίων
εἶναι σφετέραν, τὴν δὲ σφετέραν τῶν πολεμίων,
πόρον δὲ τὰς ναῦς, ἀπορίαν δὲ τὸν πόρον.

(*d*) τηνδὶ λαβὼν τὴν ψῆφον ἐπὶ τὸν ὕστερον
μύσας παρᾷξον κἀπόλυσον, ὦ πάτερ.

(*e*) πείσαι τοι Μίλων καὶ τὼς λύκος αὐτίκα λυσσῆν.

(*f*) κεἰ μὲν ἀποστέρξαιμι, τὰ πάντα κεν εἰς δέον ἔρποι·
νῦν δὲ πόθεν ; μῦς, φαντί, Θυώνιχε, γεύμεθα πίσσας.

(*g*) καὶ εἰ ἐπανέροιτο Ἡ περὶ τί ; εἴποιμ' ἂν ὥσπερ οἱ ἐν τῷ δήμῳ συγγραφόμενοι, ὅτι τὰ μὲν ἄλλα καθάπερ ἡ ἀριθμητικὴ ἡ λογιστικὴ ἔχει· περὶ τὸ αὐτὸ γάρ ἐστι, τό τε ἄρτιον καὶ τὸ περιττόν· διαφέρει δὲ τοσοῦτον, ὅτι καὶ πρὸς αὐτὰ καὶ πρὸς ἄλληλα πῶς ἔχει πλήθους ἐπισκοπεῖ τὸ περιττὸν καὶ τὸ ἄρτιον ἡ λογιστική.

(*h*) φυγὰς δὴ γίγνεται ἐκ τούτων, καὶ ἀπεστερηκὼς ὑπ' ἀνάγκης ὁ πρὶν ἐραστής, ὀστράκου μεταπεσόντος, ἴεται φιγῇ μεταβαλών· ὁ δὲ ἀναγκάζεται διώκειν ἀγανακτῶν καὶ ἐπιθεάζων.

(*i*) συγχεῖται γὰρ ἡ θεωρία ἐγγὺς τοῦ ἀναισθήτου χρόνου γινομένη.

(*j*) δίκαιον δὲ καὶ τραγῳδίαν ἄλλην καὶ τὴν αὐτὴν λέγειν οὐδὲν ἴσως τῷ μύθῳ· τοῦτο δέ, ὧν ἡ αὐτὴ πλοκὴ καὶ λύσις. πολλοὶ δὲ πλέξαντες εὖ λύουσι κακῶς· δεῖ δὲ ἄμφω ἀεὶ κρατεῖσθαι.

(*k*) δεῖ μὲν οὖν ἐν ταῖς τραγῳδίαις ποιεῖν τὸ θαυμαστόν, μᾶλλον δ' ἐνδέχεται ἐν τῇ ἐποποιίᾳ τὸ ἄλογον, δι' ὃ συμβαίνει μάλιστα τὸ θαυμαστόν, διὰ τὸ μὴ ὁρᾶν εἰς τὸν πράττοντα.

V. Answer any *two* of the following:—

(1) "Greek religion is a worship of Nature." Discuss this with reference to Homer.

(2) How do the tragic poets differ from Homer in their treatment of the characters of Oedipus, Clytemnestra, Achilles, and Menelaus.

(3) What do you know of idyllic poetry before Theocritus? What different influences can you trace in his writings?

(4) How far is Aristotle's literary judgment limited by the prejudices of his age? What traces are found in his *Poetics* and *Rhetoric* of Plato's teaching in the *Phaedrus*?

(5) Apply the Aristotelian canons to the *dénoûments* of (*a*) *Romeo and Juliet*, (*b*) the *Medea*.

VI. Answer any *two* of the following:—

(1) Describe and illustrate the characteristics of the three Greek races—Ionian, Dorian, and Aeolian.

(2) What varieties may be traced in the usages of war before and during the Peloponnesian war?

(3) Sketch the life and work of Timoleon.

(4) What new light has the Ἀθηναίων πολιτεία cast on (*a*) the Draconian legislation, (*b*) the political position of Aristides, (*c*) the reforms of Ephialtes? Notice any difficulties that arise under any of these heads.

(5) Describe carefully the process by which a proposal became law at Athens.

ANCIENT PHILOSOPHY (*Optional Subject*).

Earlier Period.

Friday, *3rd April* 1896.—9 *to* 12 *o'clock.*

1. Indicate the influence of Parmenides on Greek thought prior to Plato.

2. Describe briefly the biological and psychological speculations of the Pre-Socratic philosophers.

3. To what extent is it correct to describe Socrates as a Sophist?

4. Explain briefly Plato's Theory of Ideas. What in

your opinion is the significance of the first part of the *Parmenides*?

5. Indicate the successive steps by which Socrates in the *Theaetetus* disproves the hypothesis ἐπιστήμη αἴσθησις.

6. Translate and explain:—

(*a*) ἐπὶ γὰρ τούτου πρώτου Θεόφραστος ἐν τῇ Ἱστορίᾳ, τὴν μάνωσιν εἴρηκε καὶ πύκνωσιν.

(*b*) οὐ συνίασιν ὅκως διαφερόμενον ἑωυτῷ ὁμολογέει· παλίντροπος ἁρμονίη ὅκωσπερ τόξου καὶ λύρης.

(*c*) Ξεινοφάνην ὑπάτυφον Ὁμηραπάτης ἐπικόπτην.

(*d*) αἱ γὰρ στεινότεραι πλῆνται πυρὸς ἀκρήτοιο,
αἱ δ' ἐπὶ ταῖς νυκτός, μετὰ δὲ φλογὸς ἵεται αἶσα·
ἐν δὲ μέσῳ τούτων δαίμων, ἣ πάντα κυβερνᾷ.

(*e*) οὐκοῦν ἄλλ' ὅτιοῦν δεῖ ἀποφαίνειν τὸ τὰ ψευδῆ δοξάζειν ἢ διανοίας πρὸς αἴσθησιν παραλλαγήν. εἰ γὰρ τοῦτ' ἦν, οὐκ ἄν ποτε ἐν αὐτοῖς τοῖς διανοήμασιν ἐψευδόμεθα.

(*f*) ἄκουε δὴ ὄναρ ἀντὶ ὀνείρατος. ἐγὼ γὰρ αὖ ἐδόκουν ἀκούειν τινῶν ὅτι τὰ μὲν πρῶτα οἱονπερεὶ στοιχεῖα, ἐξ ὧν ἡμεῖς τε συγκείμεθα καὶ τἆλλα, λόγον οὐκ ἔχοι· αὐτὸ γὰρ καθ' αὑτὸ ἕκαστον ὀνομάσαι μόνον εἴη, προσειπεῖν δὲ οὐδὲν ἄλλο δυνατὸν οὔθ' ὡς ἔστιν, οὐθ' ὡς οὐκ ἔστιν.

Later Period.

Friday, *3rd April* 1896.—9 *to* 12 *o'clock.*

1. Give a short account of Plato's psychology, with special reference to the *Phaedo*, *Republic* and *Timaeus*.

2. Explain generally the relation of Pleasure to the Supreme Good in (*a*) Plato's *Philebus*, (*b*) Aristotle's *Ethics*.

3. Give the steps by which Aristotle arrives at his κοινὸς λόγος of Soul.

4. What are the chief functions of κοινὴ αἴσθησις?

5. State and criticise Aristotle's ethical doctrine of the Mean;

Or,

Indicate the chief points in Aristotle's account of *προαίρεσις*.

6. Translate and explain:—

(*a*) δεῖ οὖν ἡμᾶς τούτων οὕτω διακεκοσμημένων ἀεὶ μίαν ἰδέαν περὶ παντὸς ἑκάστοτε ζητεῖν· εὑρήσειν γὰρ ἐνοῦσαν. ἐὰν οὖν μεταλάβωμεν, μετὰ μίαν δύο, εἴ πως εἰσί, σκοπεῖν, εἰ δὲ μή, τρεῖς ἤ τινα ἄλλον ἀριθμόν, καὶ τῶν ἐν ἐκείνοις ἕκαστον πάλιν ὡσαύτως, μᾶλλον ἂν τὸ κατ' ἀρχὰς ἓν μὴ ὅτι ἓν καὶ πολλὰ καὶ ἄπειρα ἐστι μόνον ἴδῃ, ἀλλὰ καὶ ὁπόσα. τὴν δὲ τοῦ ἀπείρου ἰδέαν πρὸς τὸ πλῆθος μὴ προσφέρειν, πρὶν ἄν τις τὸν ἀριθμὸν αὐτοῦ πάντα κατίδῃ τὸν μεταξὺ τοῦ ἀπείρου τε καὶ τοῦ ἑνός.

(*b*) πάσης γὰρ ἀποδείξεως ἀρχὴ τὸ τί ἐστιν, ὥστε καθ' ὅσους τῶν ὁρισμῶν μὴ συμβαίνει τὰ συμβεβηκότα γνωρίζειν, ἀλλὰ μηδ' εἰκάσαι περὶ αὐτῶν εὐμαρές, δῆλον ὅτι διαλεκτικῶς εἴρηνται καὶ κενῶς ἅπαντες.

(*c*) ἀλλ' ὁ νοῦς ὅταν τι νοήσῃ σφόδρα νοητόν, οὐχ ἧττον νοεῖ τὰ ὑποδεέστερα, ἀλλὰ καὶ μᾶλλον· τὸ μὲν γὰρ αἰσθητικὸν οὐκ ἄνευ σώματος, ὁ δὲ χωριστός. ὅταν δ' οὕτως ἕκαστα γένηται ὡς ὁ ἐπιστήμων λέγεται ὁ κατ' ἐνέργειαν (τοῦτο δὲ συμβαίνει, ὅταν δύνηται ἐνεργεῖν δι' αὑτοῦ), ἔστι μὲν καὶ τότε δυνάμει πως, οὐ μὴν ὁμοίως καὶ πρὶν μαθεῖν ἢ εὑρεῖν· καὶ αὐτὸς δὲ αὑτὸν τότε δύναται νοεῖν.

(*d*) ἀπορήσειε δ' ἄν τις τί ποτε καὶ βούλονται λέγειν αὐτοέκαστον, εἴπερ ἓν τε αὐτοανθρώπῳ καὶ ἀνθρώπῳ εἷς καί ὁ αὐτὸς λόγος ἐστὶν ὁ τοῦ ἀνθρώπου. ἦ γὰρ ἄνθρωπος, οὐδὲν διοίσουσιν· εἰ δ' οὕτως, οὐδ' ἦ ἀγαθόν.

(*e*) διὸ δεῖ τὰς ἐνεργείας ποιὰς ἀποδιδόναι· κατὰ γὰρ τὰς τούτων διαφορὰς ἀκολουθοῦσιν αἱ ἕξεις.

CLASSICAL ARCHÆOLOGY (*Optional Subjects*).

First Paper.—General.

Friday, 3*rd April* 1896.—9 to 12 *o'clock.*

1. Discuss the date of the Mycenæan civilization. What evidence is there of its connections with other civilizations?

2. Draw a sketch plan of Olympia, indicating, with

names, the principal buildings, and showing the position of the Alpheios, the Kladeos, and the hill of Kronos.

3. Trace the architectural history of the Acropolis of Athens.

4. What do you know of the methods of the Greek sculptor in stone?

5. Describe the traces of wooden construction in Greek stone architecture.

6. Briefly define the characteristics of "Mycenæan," "Dipylon," "Phaleron," and "Corinthian" vases.

7. Describe the potter's wheel, and discuss the conditions and limitations of works produced by its means.

8. Describe (with references to particular specimens) methods of working in metal by casting, incising, inlaying, and embossing (repoussé work).

9. What forms of engraved gems were current among the Greeks before the time of Alexander?

10. What evidence have we with reference to the colouring of ancient architecture and sculpture.

11. Explain the processes of (*a*) encaustic, (*b*) fresco, painting.

12. Describe the Homeric house with reference to the Homeric poems and to recent discoveries.

SECOND PAPER.—GREEK SCULPTURE.

FRIDAY, *3rd April* 1896.—2 *to* 5 *o'clock.*

1. Write an essay on the following subject:—

The progressive changes in the treatment of the erect male figure, in respect to pose, anatomy, proportions, and details, from the earliest times to Lysippus.

(N.B.—*An hour to be spent on the essay.*)

2. Comment on the following passages:—

(*a*) τὸ δὴ τεῖχος (Τίρυνθος), ὃ δὴ μόνον τῶν ἐρειπίων λείπεται, Κυκλώπων μέν ἐστιν ἔργον, πεποίηται δὲ ἀργῶν λίθων, μέγεθος ἔχων ἕκαστος λίθος ὡς ἀπ' αὐτῶν μηδ' ἂν ἀρχὴν κινηθῆναι τὸν μικρότατον ὑπὸ ζεύγους ἡμιόνων. λιθία δὲ ἐνήρμοσται πάλαι, ὡς μάλιστα αὐτῶν ἕκαστον ἁρμονίαν τοῖς μεγάλοις λίθοις εἶναι.

(*b*) ἀλλὰ τίς ὁ σπουδῇ προσιὼν οὗτος, ὁ χαλκοῦς, ὁ εὔγραμμος

καὶ εὐπερίγραπτος, ὁ ἀρχαῖος τὴν ἀνάθεσιν τῆς κόμης; μᾶλλον δὲ ὁ σός, ὦ Ἑρμῆ, ἀδελφός ἐστιν, ὁ ἀγοραῖος, ὁ παρὰ τὴν Ποικίλην· πίττης γοῦν ἀιαπέπλησται ὀσημέραι ἐκματτόμενος ὑπὸ τῶν ἀνδριαντοποιῶν.

(*c*) Phidias tamen diis quam hominibus efficiendis melior artifex creditur, in ebore vero longe citra æmulum, vel si nihil nisi Minervam Athenis aut Olympium in Elide Jovem fecisset, cujus pulchritudo adjecisse aliquid etiam receptæ religioni videtur; adeo majestas operis deum æquavit.

(*d*) Idem et doryphorum viriliter puerum fecit [et] quem canona artifices vocant liniamenta artis ex eo petentes veluti a lege quadam, solusque hominum artem ipsam fecisse artis opere judicatur.

3. On what general principles ought a restoration of the Chest of Cypselus to be based?

4. What do you know of Theodorus of Samos?

5. Discuss the interpretation of *either* the East Frieze, *or* the West Pediment of the Parthenon.

6. Describe accurately the drapery of the "Fates" of the Parthenon, and write some critical notes on the artistic treatment of form and drapery in the "Theseus," the "Fates," and the horses' heads of Helios and Selene.

7. Describe the Athene Parthenos by reference to ancient literature and extant copies.

8. Give an account of Scopas, with special reference to extant works attributed to him.

9. Define the position and character of the Pergamene School of Sculpture.

B.—MATHEMATICS AND NATURAL PHILOSOPHY.

MATHEMATICS.

MONDAY, 30*th March* 1896.—9 *to* 12 *o'clock.*

1. Prove that the infinite product

$$\left\{1-\left(\frac{2x}{\pi}\right)^2\right\}\left\{1-\left(\frac{2x}{3\pi}\right)^2\right\}\left\{1-\left(\frac{2x}{5\pi}\right)^2\right\}\ldots$$

is convergent and equal to $\cos x$.

Deduce that

$$\frac{\pi^2}{8} = 1 + \frac{1}{3^2} + \frac{1}{5^2} + \frac{1}{7^2} + \ldots ad\infty;$$

$$\frac{\pi^4}{96} = 1 + \frac{1}{3^4} + \frac{1}{5^4} + \frac{1}{7^4} + \ldots ad\infty.$$

2. Find the equation to the circle of curvature at any point of a conic.

Shew that there are three circles of curvature which have a given point for their fourth intersection with the conic.

3. Prove that the equation to a conic may be put in the form $xy = cz^2$, where $x = 0$, $y = 0$, $z = 0$ are the equations to three straight lines.

Express the co-ordinates of any point on a conic rationally in terms of a parameter; and shew that there are ∞^3 lineo-linear transformations of co-ordinates by which a conic transforms into itself.

4. Find an expression for the length of the arc of an ellipse. An ellipse of small eccentricity rolls on a straight line: shew that, if the fourth power of the eccentricity be neglected, the centre traces a curve of sines.

5. Shew that in the evaluation of the limit when a' and b' become infinite of the integral $\int_a^{a'} dx \int_b^{b'} dy\, f(x,y)$ the order in which a' and b' acquire their limiting values is indifferent, provided the integral $\int_a^{\infty} dx \int_b^{\infty} dy \bmod f(x,y)$ is finite.

Evaluate $\int_0^{\infty} e^{-x^2} dx$.

Shew that the integral

$$\int_0^{\infty} \frac{dx}{x} \left\{ \frac{2n-1}{2} e^{-x} + \frac{x+2}{2x} \left(e^{-nx} - e^{-\frac{x}{2}} \right) \right\}$$

is finite; and evaluate it by integration from $\int_0^{\infty} e^{-ax} dx$ or otherwise.

6. Shew that the most general fractional linear transformation of two variables is equivalent to a conical projection.

Hence shew that any two plane quadrilaterals can be put in perspective.

7. Shew that the joins of corresponding points of two projective ranges envelope a conic. Determine the form of the relation when the intersection of the two lines is the centre; and find the eccentricity.

8. Prove the existence of the focal lines of a cone of the second degree, namely, that there are two lines such that the section of the cone by a plane perpendicular to either has its intersection with that line as one focus.

Shew that the circular sections of the reciprocal cone are perpendicular to these focal lines.

9. Shew that the tangent planes at any point P to the three conicoids of a confocal system through that point are conjugate with respect to the tangent cone from P to any conicoid of the system; and find the equation to the cone referred to there as co-ordinate planes.

10. Prove that the integral of a function round any circuit within which the function is synectic is zero.

By considering an integral round such a contour, shew that $\int_0^\infty \frac{x^{a-1}}{1+x}dx = \pi \operatorname{cosec} a\pi$, a lying between 0 and 1.

Or, as an alternative, shew that $\int dx/\sqrt{\{(a+bx^2)\ (c+dx^2)\}}$ can always be transformed into $\int dy/\sqrt{\{(1-y^2)\ (1-k^2y^2)\}}$ where $0<k<1$. Reduce $\int dy\ y^2/\sqrt{\{y\,(1+y)(1+y^2)\}}$ to Legendre's Normal Forms.

11. Investigate Fourier's series for a function of x between the limits $\pm\pi$.

Express by a Fourier series a function which is equal to $-\pi/2$ when $-\pi<x<0$, and equal to $+\pi/2$ when $0<x<\pi$.

Prove that $\int_0^\infty \frac{\sin xy}{y}dy$ is equal to this function within the given limits.

12. Investigate the conditions that the function X_1dx_1+

$X_2dx_2 \ldots + X_ndx_n$ of the n variables $x_1x_2 \ldots$ should be an exact differential of a function V; and when the conditions are satisfied shew that V can be found by quadratures, and is determined except for an additive constant.

Shew that

$$r^{-5}\{(xr^2 + 2x^2 - y^2 - z^2)dx + (r^2 + 3x)ydy + (r^2 + 3x)zdz\}$$

is an exact differential r^2 being $= x^2 + y^2 + z^2$; and find its integral.

MONDAY, 30*th March* 1896.—2 *to* 5 *o'clock.*

1. If the nth term of a series be of the form $f(n)/(n+\alpha_1)(n+\alpha_2)\ldots\ldots(n+\alpha_r)$, where $\alpha_1, \alpha_2, \ldots\ldots \alpha_r$ are integers, and $f(n)$ an integral function of n whose degree does not exceed $r-2$, shew that the series admits of "summation to n terms."

Exemplify by summing $\sum_2^n (n+1)/(n^2-1)(n+2)$.

2. Give a rigorous proof of the Binomial Theorem for any real commensurable exponent.

If $(1-x)^{-n} = 1 + {}_nH_1x + \ldots\ldots + {}_nH_rx^r + {}_nP_rx^{r+1}$, shew that ${}_nP_r = \{{}_1H_r + {}_2H_r(1-x) + \ldots + {}_nH_r(1-x)^{n-1}\}(1-x)^{-n}$.

3. Shew how to find the equation to the principal axis and the co-ordinates of the focus of a parabola whose general equation is given.

Find, either geometrically or analytically, the locus of a point such that the points of contact of the tangents drawn from it to a given Conic subtend a constant angle at a Focus.

4. Prove that, provided $f(x)$ satisfy certain conditions,

$$f(x+h) = f(x) + \frac{h}{1!}f'(x) + \ldots + \frac{h^n}{n!}f^{(n)}(x) + h^{n+1}f^{(n+1)}(x+\theta h).$$

Evaluate $L\{(1+1/x)^x - 1\}/x$, when $x = \infty$.

An ellipse whose centre is at the origin, and whose principal axes coincide with the axes of x and y, touches the straight line $x/p + y/q = 1$: find the semi-axes when the area of the ellipse is a maximum; and also the co-ordinates of its point of contact with the given line.

5. Trace the curve $x^3(y-1)^2 + xy - y^2 = 0$.

6. Find the necessary and sufficient conditions that the general equation of the second degree represent a pair of planes. In the special case where the equation is homogeneous, find the equation to a plane through the origin perpendicular to each of the planes represented by the equation.

Pairs of perpendicular planes are drawn one through each of the fixed straight lines $L_1 = 0$, $M_1 = 0$; $L_2 = 0$, $M_2 = 0$. Shew that the planes through the origin perpendicular to the intersections of these pairs envelop a quadric cone.

7. Find the principal invariants in any transformation of a quadric function which corresponds to passage from one set of oblique Cartesian axes to another; and give geometrical interpretations in some special case.

Shew that an elliptic paraboloid has no hyperbolic sections, and that, if it be a surface of revolution, the latus rectum of each parabolic section is constant, and the locus of the foci of all the parabolic sections is an equal paraboloid.

8. Give a process for reducing the integral $\int dx/(a'x^2 + 2b'x + c')\sqrt{(ax^2 + 2bx + c)}$, where $b'^2 < a'c'$.

Reduce $\int dx/x^3\sqrt{(x^2 + a^2)}$ and $\int dx \cosh x \cos^3 x$.

9. Establish Jacobi's formula for transforming a multiple integral; and apply it to prove that $\mathrm{B}(m,n) = \Gamma(m)\Gamma(n)/\Gamma(m+n)$.

Shew that $\int_0^1 dx(x^{2m-1} + x^{2n-1})/(1 + x^2)^{m+n} = \frac{1}{2}\Gamma(m)\Gamma(n)/\Gamma(m+n)$.

10. Prove that the p-discriminant locus of the equation $\varphi(x,y,p) = 0$ is in general a locus of cusps.

Find the locus of inflexions on the integral curves of $x^2p^2 + yp + y = 0$; and verify by approximate calculation that $x = 0$ is part of this locus.

11. If the differential equations $\varphi(x,y,p) = a$, $\psi(x,y,p) = b$ be independent first integrals of the same differential equation of the second order, shew how to integrate the equation $F\{\varphi(x,y,p), \psi(x,y,p)\} = 0$.

Integrate $x^2\frac{d^2y}{dx^2} - 5x\frac{dy}{dx} + 8y = x^2 \log x$;

and $\frac{d^2y}{dx^2} + \frac{1}{x^2-1}\left(\frac{dy}{dx}\right)^2 - \frac{1}{x-1}\frac{dy}{dx} = 0.$

12. Establish the so-called dual transformation of a partial differential equation of the first order; and indicate a general class of differential transformations of which it is a particular case.

Integrate the equation $zz(1-x)p + zz(y-1)q + x - y = 0$; also find one algebraic integral surface which touches the sphere $x^2+y^2+z^2=1$; and shew that another can be found.

Integrate $x_1p_1^2 + x_2p_2^2 + x_3p_3^2 = 1$.

13. Shew how to integrate the equation $\Phi\left(\frac{d}{dx}, \frac{d}{dy}\right) z = 0$, where Φ is a homogeneous integral function of d/dx and d/dy.

Solve $x^2\frac{d^2z}{dx^2} - y^2\frac{d^2z}{dy^2} = \log(xy)$.

TUESDAY, 31*st March* 1896.—9 *to* 12 *o'clock.*

(*Write Dissertations on not more than* TWO *of the following subjects.*)

1. The solution of an algebraical equation by means of asymmetric rational functions of its roots, with special applications to equations of the 2nd, 3rd and 4th degrees.

2. The theory of the foci of a conic section.

3. Ellipsoidal Co-ordinates.

4. The expansion of an Algebraic Function in power series.

5. The simultaneous reduction by a real transformation of two homogeneous quadratic functions to sums of squares, one of the quadratics being essentially positive.

6. The solution of the equation $\varphi(x,y,z,p,q) = 0$ by means of a primitive involving a minimum of arbitrary constants.

NATURAL PHILOSOPHY.

FIRST PAPER.

TUESDAY, 31*st March* 1896.—2 *to* 5 *o'clock.*

(*Eight Questions at most to be answered.*)

1. If the hodograph of a central orbit can also be a central orbit, the centre of attraction being the origin from which the velocities are drawn, show that the original central orbit is an ellipse or hyperbola.

2. Find the brachistochrone between two given points for a particle whose speed in any position is directly as its distance from a third given point.

3. Give the physical interpretation of the equation

$$\ddot{x} + 2k\dot{x} + n^2x = f(t)$$

where $f(t)$ is a periodic function. Distinguish between the kinds of solution which arise; discussing, in particular, the case when $2\pi/n$ is the period of $f(t)$. If, in this case, k vanish, what is the form of solution?

4. A V-shaped combination of two uniform rods, freely jointed below, is suspended from a smooth horizontal rod by means of rings at the upper ends. The rods being of equal lengths but different masses, find the impulse with which they come together from any given initial configuration. If friction act at the points of suspension, show how to take account of it in forming the equations of motion.

5. A given force acts along one of three rectangular axes, while a second force equal in magnitude acts along the line which cuts the other two axes at distances 1 and 3 from the origin. Find the Central Axis and Resultant Couple.

6. Given the principal axes and moments of inertia of two parts of the same body with respect to one and the same point, show how to find the like quantities for the whole body.

From the interior of a spheroid of uniform density a concentric spheroidal portion is removed whose principal

axis of inertia makes angle θ with the principal axis of inertia of the whole, find the positions of the principal axes of the remaining shell.

7. Find the periodic motion of a point, in one plane, under acceleration whose direction rotates uniformly, and whose magnitude is a simple harmonic function of time.

8. Find the relation between the speeds with which a projectile, fired vertically, passes through any point of its path—the resistance being as the square of the speed—and compare the space-rates of loss of energy at that point, in the ascent and descent respectively.

9. Analyse the homogeneous strain whose co-efficients are

$$\begin{matrix} 0 & 1 & e \\ e & 0 & 1 \\ 1 & e & 0 \end{matrix}$$

and find the change of length in the line whose direction is unaltered.

10. Find the motion of a cube which rotates with the same constant angular velocity about each of three non-parallel, and non-intersecting, edges.

11. Show that the external equipotential surfaces of an ellipsoidal shell, whose surface-density varies as the central distance of the tangent plane, are confocal ellipsoids.

12. Form the equation of heat conduction in a homogeneous isotropic solid. Sketch the process of finding expressions for the temperatures of the various layers of an infinite plate whose faces have been long maintained at temperatures represented by the same simple harmonic function of time (with a constant added).

SECOND PAPER.

WEDNESDAY, 1*st April* 1896.—9 *to* 12 *o'clock.*

(*Eight Questions at most to be answered.*)

1. A particle describes a circle under a retarding force whose direction makes a constant angle with the direction of motion. Determine the force and the motion.

2. A heavy particle is attached to an inextensible string,

the other end of which is fixed and is projected horizontally with speed V from the position of equilibrium. Discuss the motion and find the limiting values of V between which the tension of the string is discontinuous.

Find the value of V for which the particle is suddenly brought to rest and then oscillates.

3. Discuss the conditions of stability when a uniform hemisphere rests symmetrically on the top of a rough fixed sphere.

A rough sphere, of radius 20 inches, centre of mass 16 inches above its centre, lies in a fixed spherical shell of radius 45 inches: shew that the equilibrium is stable.

4. A rotating uniform sphere in vacuo whose centre is moving perpendicular to the axis of rotation impinges on a fixed perfectly rough plane parallel to the axis of rotation: determine the subsequent motion.

Shew that if the velocity of the point which strikes the plane resolved parallel to the plane is $\frac{2}{7}(e+1)$ times the component of the velocity of the centre in the same direction, the centre will retrace its path: e being the co-efficient of restitution.

5. Define an electric condenser, and shew that the energy of a charged condenser is $\frac{1}{2}CV^2$ where C is its capacity and V the potential difference between its surfaces.

Of three thin conducting concentric spherical shells the inner is initially without charge, the middle one at a given potential, and the outer connected to earth. Find the fall in potential of the middle shell when the inner is put to earth, the dielectric between the inner and middle shells being air, and that between the middle and outer having a given and greater specific inductive capacity.

6. Find the potential at any point due to a uniform sphere of unit density.

Shew that if V be the potential of any distribution of matter, then $\frac{d^2V}{dx^2}+\frac{d^2V}{dy^2}+\frac{d^2V}{dz^2}$ (x, y, z being rectangular co-ordinates) is zero at a point free from matter and is $-4\pi\rho$ at a point where the density is ρ.

7. Calculate the attraction of a paraboloid of revolution (with height equal to diameter of base) upon an external point in the axis, the law of force being the inverse square, and the density uniform.

8. Find the Magnetic Potential at any point due to a uniformly and linearly magnetised sphere. Sketch roughly the forms of the equipotential surfaces and of the lines of force, and show how to find the equation of the latter.

9. Establish the theorem that the integral over a given closed surface, of the normal force due to matter attracting according to the law of the inverse square, is numerically equal to 4π times the amount of matter within the region enclosed by the surface. Thence show that the potential cannot have maximum or minimum values in a region void of matter.

10. Use the theorem of the last question to prove the characteristic property of Tubes of Force; and apply this property to the investigation of the field of force in the region bounded by two infinitely long co-axal cylindrical surfaces bearing equal and opposite charges per unit length. Calculate the capacity of a finite length.

11. Find the fundamental periods of small plane vibrations of a sphere which hangs from a fixed point by a string attached to a point in its surface, the length of the string and the diameter of the sphere being each one foot.

12. Establish the general equations of equilibrium of a flexible cord, and apply them to the case of a chain hanging under gravity.

If the chain, supposed uniform, hang from two given points at the same level, what weight must be attached to the lowest point so that each half may be part of a catenary whose vertex is vertically below the point of suspension of the other half?

THIRD PAPER.

WEDNESDAY, 1*st April* 1896.—2 *to* 5 *o'clock.*

(*Eight Questions at most to be answered.*)

1. Form the differential equation for the Action of a free particle under a conservative system of forces. Discuss the

case in which the variable term of the expression for the potential energy is proportional to the square of the distance from a fixed point.

2. Find the utmost rate of descent of temperature with elevation which is consistent with atmospheric equilibrium.

3. Find the nature of fluid motion in circles about an axis, when there is a velocity-potential, and shew how the portion which is at any instant in a plane through the axis becomes gradually deformed.

4. Shew that the latent heat of isothermal expansion varies as the absolute temperature, and as the rate of increase of pressure with temperature at constant volume. What is the physical interpretation of the condition $t\frac{dp}{dt} - p = 0$?

5. Find an expression for the excess of the specific heat of a body at constant pressure over that at constant volume, when the form of its isothermals on Watt's diagram is given. Which of these quantities is the easier to measure in the case of a gas, and why?

6. Find the distribution of electricity on the surfaces of each of a system of concentric spherical shells; when the charges of the 1st, 3rd, 5th, etc., and the potentials of the 2nd, 4th, 6th, etc., are given.

7. Find the differential equation of the path of a particle under a central force.

The central force being inversely proportioned to the square of the distance, determine the path of a particle projected in a given manner.

8. Two comets describing confocal conics with equal latera recta collide. Determine the second focus of the path of the combined masses; and find the ratio of their masses if the path is a parabola.

9. A particle slides under gravity on a smooth curve in a vertical plane: find the speed at any point and the pressure on the curve.

A smooth parabolic cylinder has the axis of its section by a plane perpendicular to the generators vertical, and a

particle resting on the highest generator is slightly disturbed. Determine its motion.

10. Discuss the conditions of stability of a floating body.

Find the part of the surface of flotation of a cube for which one corner only is not immersed, and shew that the equilibrium is stable if, and not unless, the specific gravity is greater than $\frac{119}{128}$.

11. Shew that in a fluid at rest under gravity the surfaces of equal pressure are horizontal planes.

A right circular cone with its axis vertical and vertex upwards, just full of heavy fluid of uniform density ρ, is moved horizontally with uniform acceleration f. Shew that the resultant pressure on the base is the greater of $\pi g \rho r^2 h$ and $\pi f \rho r^3$, where r is the radius of the base, h the height of the cone.

12. Determine the force acting on any element of a conductor in consequence of a charge of electricity on the conductor.

Find the charge which must be given to a soap bubble in order that it may be in equilibrium with the internal and external air of the same density.

C.—MENTAL PHILOSOPHY.

(*Examination postponed till October.*)

D.—ENGLISH (LANGUAGE, LITERATURE, AND BRITISH HISTORY).

FIRST PAPER.

FRIDAY, 27*th March* 1896.—9 *to* 12 *o'clock.*

(N.B.—*Not more than* NINE *Questions to be attempted.*)

1. Compare the views of Aristotle as to the purpose and province of Rhetoric with those of Quintilian.

2. Discuss Aristotle's conception of the Ideal Tragic Hero.

3. Explain Bacon's views concerning the nature of Poesy, as given in the *Advancement of Learning.*

4. Summarise Guest's account of the history of the Alexandrine verse; *or*, of the Common Metre.

5. Sketch the history of Rhyme in English verse.

6. Criticise Wordsworth's teaching as to Poetic Diction.

7. Give some account of the work of the Caroline poets, and estimate its value.

8. Write a criticism of Milton's prose.

9. Trace the evolution of Literary Criticism from Dryden to Johnson.

10. "The last years of Pope saw the Dawn of Naturalism English Poetry." Explain and exemplify this.

11. Sketch briefly the history of English Prose Style from Sir Thomas Browne to De Quincey.

12. Write an appreciation of Scott as a poet.

SECOND PAPER.

FRIDAY, *27th March* 1896.—2 *to* 5 *o'clock.*

Write an Essay upon *one* of the following subjects:—

1. The Renaissance elements in Elizabethan Literature.

2. Rhythm in Prose.

3. "The grand power of Poetry is its interpretative power."—MATTHEW ARNOLD.

THIRD PAPER.

SATURDAY, *28th March* 1896.—9 *to* 12 *o'clock.*

(N.B.—*Not more than* NINE *Questions to be attempted.*)

1. Write a History of the Sonnet form, from its introduction till the time of Milton.

2. Do the conditions of Theatrical performances account for any of the characteristics of the Elizabethan Drama?

3. Write an appreciation of Webster as a dramatist and poet.

4. Consider the movement of English Prose from Ascham to Hooker.

5. Give some account of Pamphlet Literature during your special period.

6. Examine the work of the Historical Poets of the Elizabethan Period.

7. Trace the Evolution of the Mask and explain Jonson's treatment of it.

8. What is the historical importance of the following works?—*The Steel Glass*, *The Mirror for Magistrates*, *Toxophilus*, *The Return from Parnassus*, *Defence of Rhyme*, *The Schoole of Abuse*.

9. Expound the literary doctrine of *Euphues*, and trace its influence on contemporary and later writers.

10. Discuss Spenser's Archaism as to its accuracy and purpose.

11. Write the praises of the Spenserian stanza.

12. Give some account of the sources of Marlowe's *Dr Faustus*, and discuss the arguments regarding the collaborated parts.

FOURTH PAPER.

SATURDAY, 28*th March* 1896.—2 *to* 5 *o'clock.*

(N.B.—*Not more than* NINE *Questions to be attempted.*)

1. Consider how far Sidney's *Apologie for Poetrie* runs counter to the lines of movement of Elizabethan Literature.

2. Note the general characteristics of the minor lyrists of the period as evidenced in Bullen's *Lyrics from the Elizabethan Song Books*.

3. Can you cite any parallelisms of thought or of expression in Shakespeare's *Sonnets* and in *Hamlet*?

4. On what internal evidence would you rely in arguing the early date of *Love's Labour's Lost*?

5. Write a characterisation of Henry V. as revealed in the play.

6. Examine the soliloquies in *Hamlet*, and their place and purpose in the play as illustrating Shakespeare's Art.

7. What features have led commentators to identify Prospero with Shakespeare himself?

8. Sketch the character of Horatio.

9. "Bacon has the oratorical genius." Show this from his *Essays*.

10. Trace the varying connotation of the term "Humour" in your period, and explain it more fully with reference to *Every Man in his Humour.*

11. "Volpone is Jonson's most characteristic play." Justify this.

12. By what influences was the character of Drummond's poetry determined?

FIFTH PAPER.

MONDAY, *30th March* 1896.—9 *to* 12 *o'clock.*

1. Translate, with linguistic notes, the following passage from the Saxon Chronicle:—

Her on þysum gere foran to Eastron Eadweard cyning het ge faran þa burg æt | Tofe ceastre. ⁊ hie ge timbran; ⁊ þa eft æfter þam on þam ilcan geare to gang dagu*m* he het a timbran þa burg æt Wiginga mere;

Þy ilcan sumera be twix hlaf mæssan ⁊ middum sumera se here bræc þone friþ of Ham tune, ⁊ of Ligera ceastre, ⁊ þonan norþan, ⁊ foron to Tofe ceastre, ⁊ fuhton on þa burg ealne dæg, ⁊ þohton þæt hie hie sceolden abrecan; ac hie þeah awerede þæt folc þe þær binnan wæs oþ him mara fultum tó com, ⁊ hie for leton þa þa burg, ⁊ foron aweg; ⁊ þa eft swiðe raþe æfter þam hie foron eft út mid stæl herge nihtes, ⁊ comon on ún ge arwe men, ⁊ genomon ún lytel, ægþer ge on mannum, ge on ierfe. be tweox Byrne wuda ⁊ Ægles byrig.

Þy ilcan siþe for se here of Huntan dune, ⁊ of East Englum, ⁊ worhton þæt ge weorc æt Temese forda, ⁊ hit budon ⁊ bytledon, ⁊ for leton þæt oþer æt Huntan dune, ⁊ þohton þæt hie sceoldon þanon of mid ge winne ⁊ mid un friðe eft þæs landes mare ge ræcan; ⁊ foran þæt hie ge dydon æt Bedan forda, ⁊ þa foran þa men út ongean þe þær binnan wæron, ⁊ him wiþ ge fuhton, ⁊ hie ge fliemdon, ⁊ hira | godne dæl of slogon.

2. (*a*) Discuss the origins of *Beowulf* and the form in which we have it.

(*b*) Translate, with annotations:—

Blondenfeaxe
ȝomele ymb ȝodne on ȝeador spræcon,
þæt hiȝ þæs æðelinȝes eft ne wendon,
þæt he siȝehreðiȝ secean come
mærne þeoden, þa ðæs moniȝe ȝewearð,
þæt hine seo brimwylf abroten hæfde.
Ða com non dæȝes: næs ofȝeafon
hwate Scyldinȝas, ȝewat him ham þonon
ȝoldwine ȝumena. Ȝistas sæ̆an
modes seoce and on mere staredon
wiston and ne wendon, þæt hie heora winedrihten
selfne ȝesawon. Þa þæt sweord onȝan
æfter heaþoswate hildeȝicelum,
wiȝbil wanian (þæt wæs wundra sum),
þæt hit eal ȝemealt ise ȝelicost,
ðonne forstes bend fæder onlæteð,
onwindeð wælrapas, se ȝeweald hafað
sæla and mæla: þæt is soð metod!
Ne nom he in þæm wicum, Weder-Ȝeata leod,
maðm-æhta ma, þeah he þær moniȝe ȝeseah,
buton þone hafelan and þa hilt somod,
since faȝe: sweord ær ȝemealt,
forbarn brodenmæl; wæs þæt blod to hæs hat,
ættren ellorȝæst, se þær inne swealt.

3. (*a*) Translate and annotate:—

Crist wæs on rodi
hweþre þer fusæ
fearran cwomu
æþþilæ til anum
ic þæt al be*heald*
S*are* ic wæs miþ sorgu*m* gi*dræfi*d
. . . . .
. . . . .
Miþ strelum giwundæd
alegdun hiæ hinæ limwærignæ.
gistoddun him *æt* h*is* *li*cæs *h*eafd*u*m
*bi*hea*l*ddu*n* hiæ per h*eafun.*

(*b*) Give the Ruthwell Text forms of *bysmeredon*, *bestemed*, *ælmihtig*, *gealgan*, *butu*, *hyldan*, *unc.*

(*c*) Discuss Mr Stopford Brooke's conjecture that the *Dream of the Rood* as we have it was re-worked by Cynewulf.

4. Translate and remark upon peculiarities of dialect in the following:—

No, þu havest wel scharpe clawe,
Ne kepich noȝt þat þu me clawe,
Þu havest clivers swiþe stronge,
Þu twengst þar-mid so doþ a tonge.
Þu þoȝtest, so doþ þin i-like,
Mid faire worde me bi-swike;
Ich nolde don þat þu me raddest
Ich wiste wel þat þu me misraddest;
Schamie þe for þin un-rede!
Un-wroȝen is þi swikel-hede;
Schild þine swikeldom vram þe liȝte,
And hud þat woȝe amon[g] þe riȝte.
Þane þu wilt þin un-riȝt spene,
Loke þat hit ne beo i-sene;
Vor Swikedom haveþ schome and hete,
ȝif hit is ope and under-ȝete.
Ne speddestu noȝt mid þine un-wrenche,
For ich am war, and can wel blenche;
Ne helpþ noȝt þat þu beo to þristé;
Ich wolde viȝte bet mid liste,
Þan þu mid al þine strengþe;
Ich habbe on brede, and ek on lengþe
Castel god on mine rise;
"Wel fiȝt þat wel fliȝt," seiþ þe wise.

5. Translate, with notes, the following from Laurence Minot:—

Þat fire ful many folk gan fere,
When þai se brandes o-ferrum flye;
Þis haue þai women of þe were,
Þe fals folk of Normundy.
I sai ȝow lely how þai lye
Dongen doun all in a daunce;
Þaire frendes may ful faire forþi
Pleyn þam vntill Iohn of France.

Franche men put þam to pine
At Cressy, when þai brak þe brig,
Þat saw Edward with both his ine.
Þan likid him no langer to lig;
Ilk Inglis man on oþers rig,
Ouer þat water er þai went;
To batail er þai baldly big,
With brade ax and with bowes bent.

With bent bowes þai war ful bolde,
Forto fell of þe Frankisch men;
Þai gert tham lig with cares colde,
Ful sari was sir Philip þen.
He saw þe toun o-ferrum bren,
And folk for ferd war fast fleand;
Þe teres he lete ful rathly ren
Out of his eghen, I vnderstand.

6. Give some account of the sources whence Layamon derived the matter of the *Brut*, and translate, with annotations, the following lines:—

Hængest eode in to þan inne: Hæȝe iboren*ne* men:
þer wunede Rouwenne. heo lædden to hallen.
he heo lette scruden: biuoren þan kinge:
mid vnimete prude. fairest alre þinge.
al þ scrud þe heo hafde on: Reowen sæt a cneowe:
heo weoren swiðe wel ibon. & cleopede to þan kinge.
heo weoren mid þan bezste: & þus ærest sæide:
ibrusted mid golde. in Æneglene londe.
Heo bar an hi*re* honde: Lauerd king wæs hæil:
ane guldene bolle. for þine kime ich æm uæin.
i-uulled mid wine: Þe king þis ihærde:
þe wes wunder ane god. & nuste what heo seide

7. (*a*) Quote from Chaucer's Prologue to the *Canterbury Tales* such lines as seem to you best to characterise the six most important pilgrims.

(*b*) Give instances from the Prologue of the strength of the French element in Chaucer's language.

(*c*) Annotate the following:—

(1) "Ful fetys was hire cloke, as I was waar."
(2) "I saugh his sleves purfiled atte honde
With grys, and that the fynest of a londe."
(3) "Hit snewede in his hous of mete and drynke."
(4) "For whether that he payde, or took by taille,
Algate he waytede so in his achate,
That he was ay biforn and in good state."
(5) "A vernicle hadde he sowed upon his cappe
His walet lay byforn him in his lappe
Bretful of pardoun come from Rome al hoot."
(6) "He kepte his pacient wonderly wel
In houres by his magik naturel."
(7) "A schirreve hadde he ben, and a countour
Was nowher such a worthi vavasour."

8. (*a*) Translate, with annotations upon obscure and obsolete terms, the following passage from Gavin Douglas :—

For to behald, it was a gloir to se
The stabillit wyndis and the cawmyt see,
The soft sessoun, the firmament serene,
The lowne illumynat air, and fyrth amene ;
The syluer scalyt fyschis on the greit
Ourthwort cleir stremis sprynkland for the heyt,
Wyth fynnis schynand brovn as synopar,
And chyssell talis, stowrand heyr and thar
The new cullour alychtnyng all the landis,
Forgane thir staunyris schane the beryall strandis,
Quhill the reflex of the diurnal bemis
The bene bonkis kest ful of variant glemis,
And lusty Flora did hyr blomis spreid
Under the feit of Phebus sulzart steid ;
The swardit soyll enbrovd wyth selcouth hewis
Wod and forest obumbrat with thar bewis
Quhois blissful branchis, porturat on the grund,
With schaddois schene schew rochis rubycund !
Towris, turattis, kyrnellis, pynnaclis hie
Of kirkis, castellis and ilke faire cite
Stude payntit, euery fyall, fane and stage
Apon the plane grund, by thar awin umbrage.

(*b*) Trace the Chaucerian influences upon Gavin Douglas and expound his theory of translation as given in *The Prologe of the First Buik of Eneados.*

SIXTH PAPER.

MONDAY, *30th March* 1896.—2 *to* 5 *o'clock.*

1. Trace the influence of French upon Middle English and Middle Scots respectively, and consider the various theories of its reach and linguistic results in each.

2. How does the Syntax of Late Middle English differ from that of Old English? Enumerate the more important differences and account for them as far as you can.

3. Give some account of the influences, external or otherwise, affecting Old English previous to the Norman Conquest. Illustrate results upon both structure and vocabulary.

4. Give some account of the more important consonantal changes and intrusions that have affected English since the Conquest.

5. Make a study of the language of Gavin Douglas with special reference to its constituents and its relation to the English and Scots of the time.

6. Distinguish the various dialects of English in the Thirteenth Century and enumerate their more prominent points of difference. Relate them, where possible, to dialectical forms previous to the Conquest.

7. Give some account of the Subjunctive Mood in Old English; *or,*

Distinguish between strong and weak inflections of Old English adjectives.

8. Identify the dialect of the following passages and give your reasons:—

(*a*) Goþ ha seide into bethleem and secheþ þet child. and wanne ye hit habbeth hi-funde swo an-uret hit. and efter þet cometh to me. and hic wille go and an-uri hit. Þet ne seide he nocht herodes for þet he hit wolde on-uri: ac for þet he hit wolde slon. yef he hit michte finde. Þo kinges hem wenten and hi seghen þo sterre þet yede bi-fore

hem. al-wat hi kam over þo huse. war ure louerd was. and al swo hi hedden i-fonden ure louerd ⁊ swo hin an-urede. and him offrede hire offrendes.

(*b*) Efte*r* ham ich biheolt þe cunfessurs hird þe liueden igod lif. *ant* haliche deiden. þe schineð as doð steorren iþe eche blissen. *ant* seoð godd in his wlite þ*at* haueð alle teares iwipet of hare ehnen. Ich iseh þ*at* schene. *ant* þ*at* brihte ferreden of þe eadi meidnes ilikest towart engles. ant feolohlukest wið ham blissin *ant* gleadien. þe libbinde iflesche ou*er*gað flesches lahe ant ou*er*cumeð cunde þe leadeð heouenlich lif in eorðe as ha wunieð hare murhðe. *ant* hare blisse. þe feierlec of hare wlite. þe swetnesse of hare song ⁊ ne mei na tunge tellen.

(*c*) Lauerd, in þi telde wha sal wone ?
In þi hali hille or wha reste mone ?
Whilke þat incomes wemles,
And ai wirkes rightwisenes ;
Þat spekes sothnes in hert his,
And noght dide swikeldome in tung his,
Ne dide to his neghburgh iuel ne gram ;
Ne ogaines his neghburgh vpbraiding nam.
To noght es lede lither in his sight ;
And dredand Lauerd he glades right.

(*d*) Hit bi-fel in þat forest · þere fast by-side,
þer woned a wel old cherl · þat was a couherde,
þat fele winterres in þat forest · fayre had kepud
Mennes ken of þe cuntre · as a comen herde ;
& þus it bitide þat time · as tellen oure bokes,
þis cowherd comes on a time · to kepen is bestes
Fast by-side þe borwȝ · þere þe barn was inne.
þe herd had with him an hound · his hert to liȝt,
forto bayte on his bestes · wanne þai to brode went.
þe herd sat þan wiþ houȝd · aȝene þe hote sunne,
Nouȝt fully a furlong · fro þat fayre child,
clouȝtand kyndely his schon · as to here craft falles.

9. Translate the following passages :—

(*a*) Æfter þissum hē fērde tō Philistēa lande, intō anre byriġ on hiera onwealde, Gaza ġe-hāten. And hīe þas

fæġnodon; be-setton þā þæt hūs þe hē inne wunode; woldon hine ġe-niman mid þǣm þe hē ūt ēode on ærne-merġen, and hine of-slēan. Hwæt þā Samson hiera sier-wunga under-ġeat, and a-ras on middre nihte tō-middes his fēondum, and ġe-nam þa burg-ġeatu, and ġe-bær on his hryċġe mid þǣm postum, swā swā hīe be-locenu wǣron, ūp tō anre dūne tō ufe-weardum þǣm cnolle; and ēode swā or-sorg of hiera ġe-sihþum.

(*b*) Silence ēvere ęt te mete; vor ȝif ōþre religiūse dōþ hit, ase ȝē wel wūteþ, ȝē ōwen bivoren alle. & ȝif ēni haveþ dēore gist, dō hire męiden ase in hire stüde te ględien hire vēre, & hēo schal habben leave tō openen hire þürl ēnes ōþer twīes, & makien singnes tōuward hire of ōne ględe chēre. Summes kurteisīe is nō-þe-leas itürnd hire tō üvele. Under semblaunt of gōd is ofte iheled sünne. Ancre & hūses lęfdi ōuh müche tō bēon bitwēonen. Ēveriche vrīdęie of þe ȝēr hōldeþ silence, būte ȝif hit bēo duble fęste; & teonne hōldeþ hit sum ōþer dai i þe wike; i þen Advent, & i þe Ümbridawes, wōdnesdawes, & frīdawes; i þe leinten þrēo dawes, & al þe swīwike vort nōn of Ęsterēven. Tō ōwr męiden ȝē muwen þauh siġġen mid lūt wōrdes hwat-se ȝē wülleþ; & ȝif ēni gōd mon is feorrene ikumen, hercneþ his spēche, and onswerieþ mid lūt wōrdes tō his askunge.

(*c*) Her fór se here of East Englu*m* ofer Humbre muþan to Eofor wic ceastre on Norþhymbre, ⁊ þær wæs micel
ge
un þuærnes þære þeode betweo'x' him selfu*m*, ⁊ hie hæfdun hiera cyning aworpenne Osbryht, ⁊ ungecyndne cyning underfengon Ællan; ⁊ hie late on geare to þa*m* gecirdon þæt hie wiþ þone here winnende wærun, ⁊ hie þeah micle fierd gegadrodon, ⁊ þone here sohton æt Eoforwic ceastre, ⁊ on þa ceastre brǽcon, ⁊ hie sume inne wurdon, ⁊ þær was ungemetlic wæl ġeslægen Norþan hymbra, sume binnan, sume butan; ⁊ þa cyningas begen ofslægene, ⁊ sio laf wiþ þone here friþ nam.

(*d*) Ich am eldre þan ich wes a winter and ek on lore.
Ich welde more þan ich dude. my wyt auhte beo more.

Wel longe ich habbe child ibeo. a werke and eke on dede.
Þah ich beo of wynter old. to yong ich am on rede.
Vnneð if lich habbe ilad. and yet me þinkþ ich lede.
Hwenne ich me biþenche. ful sore ich me adrede.
Mest al þat ich habbe idon. is idelnesse and chilce.
Wel late ich habbe me bi-þouht. bute god do me mylce.
Veole idel word ich habbe ispeke. seoþþe ich speke cuþe.
And feole yonge deden ido. þat me of-þincheþ nuþe.
Al to lóme ich habbe agult. on werke and on worde.
Al to muchel ich habbe i-spend. to lutel i-leyd an horde.
Best al þat me likede er. nv hit me mys-lykeþ.
Þe muchel folewe þ his wil. him seolue he bi-swikeþ.
Mon let þi fol lust ouer-go. and eft hit þe likeþ.
Ich myhte habbe bet i-do. heuede ich eny selhþe.
Nv ich wolde and i ne may. for elde. ne for vnhelhþe.
Elde is me bi-stolen on. er þan ich hit wiste.
Ne may ich bi-seo me bi-fore. for smoke ne for myste.
Erewe we beoþ to donne gód. vuel al to þriste.
More eye stondeþ mon of mon. þan him to cryste.

ENGLISH (General British History).

TUESDAY, 31*st March* 1896.—9 *to* 12 *o'clock.*

(N.B.—*Not more than* NINE *Questions to be attempted. The Questions should be selected from different parts of the paper.*)

1. Compare the organisation and principles of the early Celtic and Roman churches, and account for the eventual domination of the latter in England and Scotland.

2. To what extent were feudal customs developed in England before 1066?

3. What light does the history of Godwin and his sons throw on the political conditions of England in their day?

4. What defects in the Norman system were discovered by the events of Stephen's reign?

5. Enumerate, and describe the limits of, Henry II's possessions in France, stating how and when they were lost to England.

6. What decisive changes did the kingdom of Scotland undergo in the 11th and 12th centuries?

7. Distinguish between monks and friars, and state shortly what you know about the most influential orders in the time of Henry III.

8. What claim has Edward I to be considered the "greatest of the Plantagenets"?

9. Compare Chaucer's view of English society with that of Langland. Which do you think the more correct?

10. What special causes of anarchy existed (*a*) in England, (*b*) in Scotland, in the 15th century, and what were common to both countries?

11. Criticise the Tudor policy in Ireland, stating and explaining the changes which it underwent.

12. Examine the aims and methods of Mary Stewart during her personal reign in Scotland.

13. Compare the principles of government followed by Charles I with those of Charles II.

14. Account in general terms for the success of British foreign policy during the period 1700-1763.

15. Note succinctly the historical value of the writings of Milton, Dryden, Swift, Horace Walpole, Junius.

16. What considerations led Pitt to insist on the Union with Ireland?

17. Relate the history of the Chartist movement, and examine the causes of its growth and ultimate decay.

18. Is Lord Palmerston to be regarded as a follower of Canning in respect of his foreign and domestic policy?

BRITISH HISTORY.

SECOND PAPER.

TUESDAY, 31*st March* 1896.—2 *to* 5 *o'clock.*

1. *Five* only of the following subjects to be discussed:—

(*a*) Pre-Wycliffite conflicts between State and Church. (*b*) Wycliffe's Precursors. (*c*) Career of Wycliffe in outline. (*d*) Wycliffe's distinctive doctrines, ecclesiastical and political. (*e*) Wycliffe, Chaucer, Langland. (*f*) Wycliffism

and Lollardy, 1384-1517. (*g*) The Oxford Reformers. (*h*) The English Bible and its history.

2. Explain and discuss briefly *three* of:—

(*a*) Statuit rex ne religiosi terras aut tenementa ulterius sibi appropriarent, nisi salvo jure et servitio dominorum feudi quorumcunque. (*b*) Clero in denegatione persistente subsidii, Rex ipsum a sua protectione exclusit. (*c*) Whan Adam dalf and Eve span, Wo was thanne a gentilman? (*d*) If they meynten here opiniones, thei schuld be committed to seculere hand, and thei schuld brenne hem and her bokes. (*e*) He sette not his benefice to hyre, . . . And ran to London . . . to seeken him a chaunterie for soules. (*f*) Impanatio; accidentia sine substantia; supererogata merita; dominium; officium regis; vir evangelicus; vera ecclesia.

E.—HISTORY.

CONSTITUTIONAL HISTORY.

FIRST PAPER.

FRIDAY, 27*th March* 1896.—9 *to* 12 *o'clock*

Write short essays on *three* subjects in each of the following groups:—

I.—ENGLISH.

(*a*) The Revolution Kingship. (*b*) Party Government. (*c*) The Elder Pitt, or Burke, or the Younger Pitt. (*d*) The American Revolution. (*e*) Cabinet System. (*f*) Religious Toleration. (*g*) Parliamentary Reform.

II.—FOREIGN.

(*a*) Constitution of the U.S.A. (*b*) The present French Polity. (*c*) The modern German Empire. (*d*) The Prussian form of Government. (*e*) The Swiss Confederation. (*f*) Principles and peculiarities of the above constitutions, historically and critically considered.

SECOND PAPER.

FRIDAY, 27*th March* 1896.—2 *to* 5 *o'clock.*

1. Write short essays on *four* of the following subjects:—

(*a*) Wycliffe's Precursors; (*b*) The Hildebrandine Revival;

(*c*) Wycliffe's doctrines, in outline; (*d*) His political influence; (*e*) Lollardy; (*f*) Council of Constance, or that of Basel; (*g*) Wycliffism in Bohemia; (*h*) The good seed in England (1384-1517).

II. Translate, explain, and discuss *three* of the following passages or groups:—

(*a*) Tha com se ærceb. of Cantwarabyrig to Rome and wæs thære fulle seouenight ær he mihte cumen to thes papes spræce; . . . forthan thæt he hæfde underfangen thone ærcebiscoprice togeanes tha muneces of the mynstre and togeanes rihte. Ac thæt ofercom Rome thet ofercumeth eall weoruld, thæt is gold and seolure, and se pape gaf him his pallium.

(*b*) Isto anno in tantum permissa est Romanorum ascencio quod episcopus Lincolniensis super hoc stupefactus fecit a suis clericis diligenter computari et considerari alienorum proventus in Anglia. . . . Redditus clericorum alienorum . . . ad lxx. millia marcorum ascendit; redditus vero regis non ad ejus partem tertiam computatur.

(*c*) The Church of Rome is not hed of alle cherchis. Peter had no more auctorite thanne the othir Aposteles, ne the Pope no more power than anothir prest. Temporal lordes may take away the godes fro the church whan the persones trespasin. . . . Wiclef resumed the eld dampned opinion of Berengari.

(*d*) Now hath the pope pouwer . pardoun to graunte,
The people withoute penaunce . to passe to Joye.
This is a lef of vre bileeue . as lettret men vs techeth,
And so bileeue I lelly . (vr lord forbeode hit elles!)
That pardoun and penaunce . and prayers don sauen
Soules that han sunget . seuen sithes dedlich.

(*e*) I smelle a loller in the wynd, quod he.
'Hoo! good men,' quod our hoste, 'herkneth me,
Abydeth, for goddes digne passioun,
For we shal han a predicacioun;
This loller heer wil prechen vs som-what.'
'He shal no gospel glosen heer ne teche,

He wolde sowen som difficultee,
Or springen cokkel in our clene corn.'

(*f*) L' Ordre de Bel-Eyse . . . .
Freres e sueres ensemble ;
C'est bon Ordre, come me semble . . . .
E sount cheschun jour yvre,
Quar ne sevent autre vivre ;
Mès il le fount pur compagnie,
E ne mie pur glotonie . . . .
E tote foiz après manger
Deyvent il de dreit precher . . . .
E les cuers serront enmoistez,
De plus leger serrount oyez.

THIRD PAPER.

SATURDAY, *28th March* 1896.—9 *to* 12 *o'clock.*

I. Discuss *five* of the following topics :—

(*a*) The Anglo-Saxon conception of kingship. (*b*) The Norman monarchy. (*c*) The era of Magna Charta. (*d*) The Lancastrian régime. (*e*) Henry VIII. and Charles I. contrasted. (*f*) The Revolution of 1688-9. (*g*) The British kingship in 1780 and 1880.

II. Explain and discuss *three* of the following passages :—

(*a*) Ther bith ij kyndes of Kyngdomes . . . *dominium regale* and *dominium politicum et regale.* (*b*) He mey sett vppon thaim tayles and imposicions with owt thair assent. (*c*) Seynt Louis sette neuer tayles with owt the assent of the iij estates. (*d*) But sithyn the Ffrench kynges haue yerely sette tayles vpon the commons with owt the assent of the iij estates. (*e*) Wer thurgh thai gon crokyd, and ben feble, not able to fight . . . and the kynge is compellid to make his armeys of straungers. (*f*) Ffor lake off money, the kynge rewarded tham with lande, . . . yff aboff thair merytes, the lande shulde retorne to the Crowne. (*g*) The kynge's counsell was wonned to be chosen off the grete lordes off the lande . . . but hit is thought gode that ther were chosen xij spirituell men and xij temporell men off the wysest and best disposed.

HISTORY (British History).

FIRST PAPER.

MONDAY, 30*th March* 1896.—9 *to* 12 *o'clock.*

(N.B.—*Not more than* EIGHT *Questions to be attempted.*)

1. Compare the four Conquests—Roman, Anglo-Saxon, Danish, Norman—in respect of (*a*) their nature, (*b*) their limits, (*c*) their effect on the political unification of the country.

2. Show how Northumbria bade fair to be the nucleus of a state including the whole of Britain, and explain why this prospect was not realised.

3. What measures were adopted by the four Norman kings to curb the power of the Baronage, and with what success?

4. Contrast the condition of Ireland in the sixth and eleventh centuries, and account for the change.

5. What were the questions at issue between Church and Crown in the reigns of Henry I. and Henry II., and how were they settled?

6. Indicate the leading features in the misgovernment of Henry III., and the measures adopted by the Barons to put an end to it.

7. Give illustrations of the prevalence of Norman influence in Scotland in the twelfth century.

8. Trace the development of the constitution of Parliament in Edward I.'s reign, and illustrate by a detailed description of the Model Parliament.

9. Explain Edward I.'s different schemes for uniting Scotland with England, and account for his failure in each case.

10. Show how the mediæval Guilds influenced (*a*) trade and industry, (*b*) the development of the town.

11. What are the chief authorities for the Battle of Hastings? Give a critical estimate of their value as historical authorities.

12. Mention the more important English historians of the twelfth *or* the thirteenth century, and give a detailed estimate of any *one* of them.

SECOND PAPER.

MONDAY, 30*th March* 1896.—2 *to* 5 *o'clock.*

(N.B.—*Not more than* FOUR *Questions to be attempted in each section.*)

I.

1. Show (with the aid of a map, if possible) what parts of France belonged to the King of England in 1200, 1300, 1360, 1420, and 1450, and state the immediate cause for the changes at each successive period.

2. Give an outline of the chief events in Edward III.'s war against France to 1360, and show how the war reacted on the commercial development and social condition of England.

3. What anti-Papal legislation was passed in Edward III.'s reign, and what abuses rendered it necessary?

4. Give a detailed account of the causes of the rising of 1381.

5. Write an account of the difficulties James I. of Scotland had to encounter on his return to his kingdom, and of the measures he adopted to overcome them.

6. How do you account for the collapse of the Lancastrian monarchy? What light is thrown on the event by the writings of Fortescue and the Paston Letters?

7. Explain the Statute of Kilkenny, and the circumstances which led to its being passed.

II.

8. What are the chief measures by which the Reformation was carried out in England? Contrast the process with that by which the Reformation was achieved in Scotland.

9. Illustrate and explain the decline of French and the rise of English influence in Scotland in the sixteenth century.

10. At what periods of English history have Impeachments been common? Explain why they have been comparatively frequent at these periods and rare at others.

11. Trace and account for the changes in the relation-

ship between England and Holland throughout the seventeenth century.

12. What attempts were made, after the Union of the Crowns, to bring about a closer union between England and Scotland? What obstacles deferred success in each case, and what forces contributed most to its ultimate accomplishment?

13. What were the chief features of the domestic policy of Walpole, *or* the younger Pitt?

14. Explain the constitution and working of Grattan's Parliament, and show why it was extinguished.

HISTORY (England and Europe, 1815-1878).

FIRST PAPER.

TUESDAY, 31*st March* 1896.—9 *to* 12 *o'clock.*

(N.B.—*Not more than* EIGHT *Questions to be attempted.*)

1. Illustrate the influence of Austria in Italy from 1820 to 1831.

2. To what extent is Canning to be regarded as a regenerator of Europe?

3. Discuss the policy of the reactionary party in France between 1820 and 1830. Are any parallels to be found in Great Britain?

4. Sketch the history of the Greek Insurrection, and explain its success.

5. Can you illustrate from the memoirs of Chateaubriand and Guizot the attitude of the reactionary and liberal parties in France before the Revolution of July?

6. Trace the changes undergone by the foreign policy of Louis Philippe. What effect did they produce on his position in France?

7. Sketch the life and estimate the importance of Thiers *or* of Lamartine (*a*) as a politician, (*b*) as a writer.

8. Compare the careers and aims of Don Miguel and Don Carlos in Portugal and Spain.

9. What is your opinion of Sir Robert Peel as a statesman?

10. What effect did economical questions and socialistic theories have in preparing the Revolution of 1848 (*a*) in France, (*b*) in the rest of Europe?

SECOND PAPER.

TUESDAY, 31*st March* 1896.—2 *to* 5 *o'clock.*

(N.B.—*Not more than* EIGHT *Questions to be attempted.*)

1. To what causes do you attribute Louis Napoleon's success in setting up the Second Empire?

2. Criticise the policy of Charles Albert in 1848-49.

3. "The jealous spirit of nationality was at once the source and the bane of the Hungarian Revolution." Comment on this remark.

4. Why is the Conference at Olmütz regarded as so humiliating an event for Prussia?

5. What are the chief contemporary authorities for the French Revolution of 1848? Give some criticism of any one of them.

6. Discuss the motives of (*a*) France, (*b*) Great Britain in entering upon the Crimean War, and criticise the policy of Austria in this connexion.

7. Draw a comparison between Bismarck and Cavour in respect of their aims and methods, and the difficulties which they respectively had to overcome.

8. Write a life and estimate the political importance of Mazzini *or* of Garibaldi.

9. Sketch briefly the history of the Franco-German war of 1870 71, and explain the success of Germany.

10. Trace the origin of the Russo-Turkish war of 1878. In what state did it leave the Balkan Peninsula?

GRADUATES IN ARTS.

SPONSIO ACADEMICA.

Nos qui Nomina subsignamus Magisterii titulo jamjam donandi Spondemus nos in omni debitae gratitudinis officio erga Universitatem Academicam Edinburgensem ad extremum vitae halitum perseveraturos.

GRADUATES WITH HONOURS—1889-1896 *inclusively.*

The names of all Graduates in Arts with Honours previously to 1889 will be found in the List of Graduates of the University published in 1889.

The contractions Class., Phil., Math., Engl., and Nat. Sc., indicate the Departments or Groups of Classics, Mental Philosophy, Mathematics and Natural Philosophy, English, and Natural Science, respectively; and the Italic Numerals, i., ii., and iii. indicate First, Second, and Third Class Honours respectively.

1889.

Class. i., Patrick Duncan, Harry Angus Alexander Kennedy, Thomas Ross Mills, Jas. Cruickshank Smith, John Tennant.

Class. ii., Robert Alex. Falconer, Alexander Harris Hutt.

Phil. i., Charles Mackinnon Douglas, William George Smith.

Phil. ii., David Walton Vaughan.

Math. i., James Ireland Craig, William Andrew Knowles, Jas. Fairbairn M'Kean.

Nat. Sc., Alexander Bremner, John Brown Clark, David Davidson, John Melvin Lowson, Robert Stewart M'Dougall, John Machray, John Hally Meikle, Harry Fisher Menzies, Alexander Gordon Wallace, John Young.

1890.

Class. i., John Maclennan, James Watt.

Class. ii., William Brereton Dennison, William Barron Stevenson.

Phil. i., Andrew Nisbet Bogle, Duncan Mackenzie, Thomas Dixon Rutherford, James Stewart.

Phil. ii., Henry Reynolds Brown, William Elmslie Wilkie Brown Dempster, Arthur Herbert Gray, Walter Hardie.

Math. i., Charles Tweedie.

Nat. Sc., James Adamson, William Lewis Martin, John Myles, Andrew Robertson Wilson.

1891.

Class. ii., John Adam Norrie, William Gibson Wedderspoon.

Phil. i., Henry Barker, John Davidson, Walter Charles Murray.

Phil. ii., Alexander Grieve, Wm. Allan Neilson, Alexander Joseph Pearse.

Math. i., John Forbes, Adam Mitchell Hunter, William Edward Philip, William Leslie Thomson, John Turner.

Nat. Sc., Robert Pollok, James Rodger Watson.

1892.

Class. ii., Peter Campbell, William Gracie, Hugh Ross Mackintosh.

Phil. i., Hugh Ross Mackintosh.

Phil. ii., Thomas Linton, William Joseph Pennell.

Math. i., James Mitchell.

Math. ii., Alexander Campbell Mackay.

Nat. Sc., John Smith Flett.

1893.

Class. i., Robert Gordon McKerron.

Class. ii., Walter Robertson Henderson, Hugh Lugton Jackson, Robert Montgomerie Samson.

Phil. i., Alexander Beith Macaulay, Hugh Pattison Macmillan, Lilias Maitland.
Phil. ii., William John Collier, Sydney Smith, William Finlayson Trotter.
Math. i., Neil Macmichael.
Math. ii., George Lowe Moffat, Frank Spence, Thomas Wilkie Wilson, James Wood.
Nat. Sc., Frank Spence, William White Taylor, William Watson.

1894.

Class i., George Liddell, James Middleton Moore, Robt. Lindsay Ross.
Phil i., James Black Baillie.
Math. i., Alexander George Burgess, John Watt Butters, Henry Herd, John Alexander Johnston.
Math. ii., Thomas Cleghorn Baillie.
Nat. Sc., John Watt Butters.

1895.

Class. i., Francis Dewar, William John Keith, Alexander Buchanan Macdonald, William Wallace M'Kechnie, Alfred Croom Paterson, William David Ross.
Class. ii., George Duncan Low, Peter M'Gregor, James MacKenna, Charles Cunningham Watson.
Phil. i., John Macaskill.
Phil. ii., James Bonnar Russell, Robert Whyte.
Math. i., John Forbes Cameron, Hugh Archibald Jamieson, James Alexander Macdonald, Thomas William Pickles.
Math. ii., Robert Candlish Melville Bell.
Engl. i., David Nichol Smith.

1896.

Class. i., Alexander Macgregor, Jessie Thomson Muir.
Class. ii., Marshall Newton Goold Gray, Tom Bell Maxwell Lamb, William Robb.
Math. and Nat. Phil. i., Malcolm Caird M'Alpin, Andrew Cameron Smith, Frank Guthrie Smith.
Math. and Nat. Phil. ii., John Smith Begg, Leopold Octavius Critchley.
Engl. i., George Douglas Shepherd.
Engl. ii., Emily Moir Milligan.
Engl. iii., Louisa Reid Boyd.

ORDINARY DEGREE, 1895-96.

1st August 1895.

Alexander Maclennan Gordon.
Robert Gray.
Robert Candlish Henderson.
George M'Lennan.

26th October.

George Nisbet Dods.
John Gibson.
Benjamin Ernest Horlick.
Norman Graham Lindsay.
William Smith Simpson.
Frank Gillies Sutherland.

11th April 1896.

1 Adams, Alexander Edgar.
Aikman, William Keith.
Alexander, Archibald.
Braine, Edward Arthur.
5 Brown, Campbell.
Brown, James M'Culloch Leigh.
Buchanan, Robert Wilson.

Burns, James Golder.
Cameron, Helen.
Chalmers, John.
Clark, Robert Veitch.
Dickson, James Robertson.
Doig, John M'Farlane.
Donaldson, James.
Drummond, Catherine Isabella.
Duncan, Thomas Ogilvy.
Duncanson, Francis.
Fairweather, George Moncur.
Gillam, John Duke.
Gray, Alexander.
Gray, James.
Guild, James Harrower.
Guthrie, William.
Hyde, John.
Kerr, Wilhelmina Morris.
Lindsay, Henry Inglis.
Lowdon, Charles Ross.
Lumsden, Oswald Farquhar.
M'Dougall, John.
M'Inroy, James Stratton.
M'Ilvride, John Aikman.
MacKenna, Robert William.
Mackie, Charles.
MacLean, John.
M'Leod, James Dryburgh.
Macmillan, John M'Callum Anderson.
Mason, Isobel Bertram.
Matthew, Isabella Wallace.
Maxwell, William.
Menmuir, Charles.
Middleton, John.
Millar, Gavin.
Munro, William Charles Brims.
Nelson, David.
Nobbs, Percy Erskine.
Pitcairn, Agnes Hogg.
Purves, James Watt.
Reid, David.
Ross, James Fleming.
Smart, John.
Smith, William Wright.
Stewart, John Walter.
Sturrock, William.
Sutherland, Annie Campbell.
Sutherland, David.
Taylor, Walter Rhind.
Torbett, George Montgomery.
Tweedie, Charlotte Elizabeth.
Welsh, Thomas Scott.
Whytock, Alfred Stuart.
Yuill, John.

SCHOOLMASTER'S DIPLOMA.

The Diploma was conferred on the following Candidates on 11th April 1896:—

A.—GENERAL DIPLOMA AND DIPLOMA FOR SECONDARY SCHOOLS.

James Mitchell, M.A., B.Sc., Edin. (First Class Honours in Mathematics).

B.—GENERAL DIPLOMA.

Helen Cameron, M.A., Edin.

LITERATE IN ARTS.

Certificate conferred in 1895-96:—Robert Erskine.

Bursaries, Prizes, Scholarships, and Fellowships in Arts.

I.—BURSARIES.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
			At present				
I.	16—	George Heriot.	£480 0 0	16	3	£30 0 0	Governors of George Heriot's Trust.
		Do. Bursaries for Girls.	630 0 0	21	3	30 0 0	Do.
		Do. High School Univer. Bursaries.	270 0 0	9	3	30 0 0	Do.
II.	1619	Archibald Johnston, Merchant in Edin.	13 2 2	1	4	13 2 2	Earl of Haddington.
III.	1622 1764 1766	John Trotter of Mortonhall, and Rev. J. Penman of Bothkennar.	12 14 1	1	4	12 14 1	Trotter of Mortonhall and Gilmour of Craigmillar, alternately.
IV.	1626 1629 164c 1726	Hugh Wight, David M'Call, and David Christie.	13 1 1	1	4	13 1 1	Town Council.
V.	1639	Dr Robt. Johnstone of London.	31 10 0	2	4	15 15 0	Johnstone of Annandale.
VI.	1639	Do. do.	25 0 0	2	4	12 10 0	Town Council.
VII.	1642 1653 1696	Weir, Jenkins, Hepburn, and Lightbody.	11 7 9	1	4	11 7 9	Town Council, 1st and 2nd Presentations, and Campbell of Aberuchill, 3rd Presentation.
VIII.	1644 1673	Jas. Dalgliesh. and Jn. M'Morran.	13 7 8	1	4	13 17 8	Town Council.
IX.	1678	John Penman, Bailie and Merchant, Edinburgh.	14 15 0	1	4	14 15 0	Society for the Benefit of the Sons of the Clergy.
X.	1678	Hector Ford of Branxton.	33 6 6	3	4	11 2 2	Town Council.
XI.	1687	Sir Andrew Ramsay of Abbotshall.	11 2 2	1	4	11 2 2	Do. and Ministers of Edinburgh.
XII.	1698	Ad. Chrystie, Under Clerk of Session.	18 0 0	1	4	18 0 0	Faculty of Advocates.
XIII.	1702	Thos. Bryson, Bailie and Merchant in Dunbar.	10 0 0	2	4	5 0 0	Ministers of the Presbytery of Dunbar.
XIV.	1703 1725	Pringle and Wardrop.	11 18 10	1	4	11 18 10	Pringle of Torwoodlee and J. C. Wardrop, W.S., alternately.
XV.	1714	Rev. Robert Brown, of Protestant Consistory at Zamose.	25 0 0	2	4	15 0 0 10 0 0	Town Council.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
XVI.	1723	Alexander Mitchell and James Shortt.	£22 0 0	1	4	£22 0 0	Livingston Learmonth of Parkhall and his heirs; Earl of Morton and his heirs.
XVII.	1734	Laurence Dundas, Professor of Humanity in the University of Edin.	About 44 0 0	2	4	About 22 0 0	Jas. Dundas of Dundas, Robt. Dundas of Arniston, and Dundas of Carronhall, by turns.
XVIII.	1768	Thos. Fraser, Clerk in the office of City Clerk, Edinburgh.	36 0 0	2	7	18 0 0	The Provost, Dean of Guild, and Treasurer of Edin.
XIX.	1784	William Hume, Eastbarns, Dunbar.	16 0 0	2	4	8 0 0	Ministers of the Presbytery of Dunbar.
XX.	1784	Rev. Jas. Millar and Spouse.	About 24 0 0	1	4	About 24 0 0	Kirk-Session of Kippen.
XXI.	1809	Dr Donald Grant, London.	180 0 0	4	4	45 0 0	Earl of Seafield, and James Mackenzie, W.S., as Dr Grant's Trus.; whom failing, Sen. Acad.
XXII.	1810	Rev. James Stuart.	36 0 0	2	3	18 0 0	Senatus Academicus.
XXIII.	1837	James Menzies.	200 0 0	4	4	45 0 0	Sir R. Menzies, Bart., & Ministers of Dull, Weem, & Fortingall
XXIV.	1837	Peter Dow, Esq. of Balmyle.	20 0 0	2	4	10 0 0	P. S. Keir, Esq. of Kindrogan, J. Small, Esq. of Dirnanean, and W. A. Keir, Esq., Yr. of Kindrogan.
XXV.	1838	Robert Blair, D.D., Barton St Andrews, Norfolk.	10 0 0	1	3	10 0 0	Principal, and Profs. of Latin, Greek, Mathematics, Logic & Metaphysics, and Moral Philosophy.
XXVI.	1846	John Jamieson, Esq., Edinburgh.	About 26 0 0	1	4	About 26 0 0	Principal, & two Profs. of the University.
XXVII.	1846	G. P. Bidder, C.E.	43 12 0	1	4	43 12 0	Senatus Academicus.
XXVIII.	1852	Wm. Lennie, Esq.	48 0 0	4	4	12 0 0	Town Council.
XXIX.	1853	John Bruce, Esq., Trinity Crescent, Edinburgh.	160 0 0	1 4	4 4	40 0 0 30 0 0	Do.
XXX.	1858	M'Diarmid Trustees.	10 0 0	1	3	10 0 0	Senatus Academicus.
XXXI.	1860	Wm. Patrick, Esq., of Roughwood.	About 120 0 0	3	4	About 40 0 0	Principal and Professors in Arts.
XXXII.	1858	Edin. Ayrshire Club.	60 0 0	2	2	30 0 0	Edin. Ayrshire Club.
XXXIII.	1863	Peeblesshire Society.	20 0 0	1	4	20 0 0	Peeblesshire Society.
XXXIV.	1864	Edin. Caithness Association.	10 0 0	1	4	10 0 0	Edin. Caithness Association.
XXXV.	1864	A. H. Rhind of Sibster.	Interest of 500 0 0	1	4	About 20 0 0	Edin. Caithness Asso.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
XXXVI.	1865	Mrs Margt. Tyndall Bruce, of Falkland.	£165 0 0	3	3	£35 0 0	Senatus.
				3	3	20 0 0	
XXXVII.	1865	Horsliehill Scott.	76 17 6	2	2	33 6 2	Do.
XXXVIII.	1867	Miss Hannah Harrison, of Lasswade.	33 5 0	1	2	33 5 0	Do.
XXXIX.	1867	Rev. John Spence	About 200 0 0	5	2	1st Year 30 0 0 2nd Year 40 0 0 50 0 0	Governors of the Spence Bursary Trust.
				1	1		
XL.	1869	Edin. Border Counties Association.	50 0 0	1	4	30 0 0	Edinburgh Border Counties Assoc.
	1872			1	4	20 0 0	
XLI.	1869	Argyllshire, Bute, and Western Isles Asso.	12 0 0	1	4	About 12 0 0	Argyllshire Association.
XLII.	1870	Stewart of Ardvorlich.	16 0 0	1	4	About 16 0 0	Proprietor of the Estate of Ardvorlich.
XLIII.	1870	David Cowan.	About 35 0 0	1	2	30 0 0	Directors of Ayr Academy.
					1	20 0 0	
XLIV.	1871	J. Robertson Sibbald.	About 250 0 0	5	3	30 0 0	Tr. of Dr J. R. Sibbald.
XLV.	1872	Angus Club.	25 0 0	1	4	25 0 0	Angus Club.
XLVI.	1873	Earl of Zetland.	About 40 0 0	1	3	About 40 0 0	Trustees of Earl of Zetland.
XLVII.	1873	The Grierson Trus.	104 0 0	4	4	20 0 0	Senatus Acad.
				1	4	26 0 0	
XLVIII.	1874	Upper Ward of Lanarkshire.	20 0 0	2	4	20 0 0	Upper Ward Assoc.
XLIX.	1874	Johnstone of Harthope.	16 5 0	1	4	16 5 0	Senatus Acad.
L.	1874	James Lambert.	About 40 0 0	1	4	About 40 0 0	Senatus Acad.
LI.	1875	Robert Marshall.	32 10 0	1	4	32 10 0	Senatus Acad.
LII.	1876	J. Fothringham of Heathpool.	39 6 0	2	4	19 13 0	Senatus Acad.
LIII.	1877	Earl of Zetland.	About 40 0 0	1	3	40 0 0	Trustees.
LIV.	1878	Edin. E. Lothian Asso.	20 0 0	1	3	20 0 0	Association.
LV.	1878	Edin. University Endowment Asso.	120 0 0	6	3	20 0 0	Senatus Academicus.
LVI.	1878	Jas. Gillan, Forres.	63 0 0	3		21 0 0	Mr Gillan's Trustees.
LVII.	1878	Dr Andrew Thomson.	100 0 0	4	4	25 0 0	Trus. of Dr Thomson.
LVIII.	1880	Rev. John Patterson.	16 2 4	1	2	About 16 2 4	Senatus Academicus.
LIX.	1881	Thomas Carlyle.	About £160	3	4	20 0 0	Senatus Acad.
LX.	1883	Subscribers to Mackinnon Testimonial	£56 5 0	3	3	18 15 0	Senatus Acad.
LXI.	1882	James Whitelaw.	70 8 6	3	3	23 9 6	Senatus Acad.
LXII.	1883	William Renton, Edinburgh.	19 9 6	1	1	19 9 6	Profs. Chrystal, Tait, Crum Brown, and Nicholson.
LXIII.	1883	Isabella Macdougall	About 120 4 3	4	3	About 30 0 0	Trustees.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
LXIV.	1886	Rob. P. Newton of Castlandhill.	£87 6 8	4	2	£21 16 8	Senatus Academicus.
LXV.	1886	Pet. C. Mann of Nairn and Durham.	80 0 0 About	3	3	26 13 4 About	Senatus Academicus.
LXVI.	1886	Richd. Allan, Feuar, Kelso.	90 0 0	3	3	30 0 0	Trustees of R. Allan.
LXVII.	1887	Mrs Kidd of Aigbarth, near Liverpool.	33 9 4 About	1	4	33 9 4 About	Senatus Academicus
LXVIII.	1887	Charles Jardine of Thorlieshope.	150 10 8 About	4	4	37 12 8 About	Senatus Academicus.
LXIX.	1887	Charles Howatson, Esq. of Dornel and Glenbuck.	27 0 0 About	1	3	27 0 0 About	Trustees.
LXX.	1888	Mrs Harriet E. Morrison.	27 0 0 About	1	4	27 0 0 About	Senatus Academicus.
LXXI.	1889	Daniel Maclaurin, London.	73 10 0 About	1	4	73 10 0	Town Council.
LXXII.	1889	James Simson, Edinburgh.	150 0 0	6	3	25 0 0	Presbytery of Edinburgh.
LXXIII.	1890	George Cousin.	28 0 0	1	3	28 0 0	Senatus Academicus.
LXXIV.	1890	Rev. Thomas Maule.	80 0 0	4	6	20 0 0	Principal, and Profs. of Humanity and Greek.
LXXV.	1891	Donald Fraser, M.D., London, and Association for the Better Endowment of the University.	50 0 0	1	1	50 0 0	Senatus Academicus.

Conditions of Foundations and Names of Bursars.

I. These *Heriot Bursaries* are for Students unconnected with the Hospital School, entering upon a regular Curriculum in Arts or Science with a view to graduation. (For remodelled scheme, see Calendar, 1887-88, p. 498.) *Bursars*—1895, J. Lochhead, J. Y. Bell, W. Geddie, H. C. Norman, A. Cormack, R. M. Matheson.

Do., for Girls. These Bursaries are for Girls Matriculating for the first time at the University with a view to graduation in Arts or Science, and cannot be held along with any other Bursary or Scholarship. *Bursars*—1895, Agnes M. Smith, Janet B. Imrie, Christina M. Ross, Jessie A. Linton, Euphemia W. Menzies, Annie L. Mackay, Jane D. Love, Rosanna Clements.

Do., High School University Bursaries. These are awarded by competitive examination among Scholars attending the High School, Edinburgh, and may be held at any University approved by the Governors. *Bursars*—1895, J. M. Darling, J. Pryde.

II. *A. Johnston Bursary.*—Each Bursar is entitled to hold this Bursary for four years, subject to the conditions that he shall pass such examination as may be required of Presentation Bursars, and shall proceed through the Curriculum in Arts,

and pass the Examinations for M.A. appropriate to each year. No one is permitted to hold the Bursary along with any other Bursary in the University. The Bursar must attend the Classes in the Arts Curriculum.

III. *Trotter and Penman Bursary.* This Bursary is held under the same conditions as No. II.

IV. *Wight, M'Call, and Christie Bursary.* This Bursary is held under the same conditions as No. II.

V. and VI. *R. Johnstone Bursaries.*—By Ordinance No. 82, the holder of each of the four Robert Johnstone Bursaries is entitled to hold his Bursary for four years, subject to the condition that he shall pass the Preliminary Examination or its equivalent, and shall proceed through the Curriculum in Arts, and regularly pass the Examinations required of Students proceeding to the degree of M.A. No person is allowed to hold any of these Bursaries along with any other Bursary in the University. *Bursar*—1892, Charles T. Macgregor.

VII. *Weir, Jenkins, Hepburn, and Lightbody Bursary.*—For a Student in Arts, who must pass the Preliminary Examination or its equivalent, and follow the Curriculum for the Degree of M.A.

VIII. The *Dalgliesh and Macmorran* Bursar must pass the Preliminary Examination or its equivalent, and proceed through the Curriculum in Arts in the University, and regularly pass the Examinations required of Students proceeding to the Degree of M.A.

IX. *Penman Bursary.*—The Bursar must attend the Classes in the Arts Curriculum.

X. Each *Ford* Bursar is entitled to hold his Bursary for four years, subject to the condition that he shall pass the Preliminary Examination or its equivalent, and shall proceed through the Curriculum in Arts, and regularly pass the Examinations required of Students proceeding to the Degree of M.A. No person is permitted to hold any of the Bursaries along with any other Bursary in the University.

XI. The *Sir A. Ramsay* Bursar holds his Bursary for four years, subject to the condition that he shall pass the Preliminary Examination or its equivalent, and shall proceed through the Curriculum in Arts, and regularly pass the Examinations required of Students proceeding to the degree of M.A. No person is permitted to hold either of the Bursaries along with any other Bursary, Fellowship, or Scholarship of any Scottish University.

XII. The *Chrystie Bursary* is usually held for four years. Candidates must pass the Preliminary Examination or its equivalent. The Bursar is taken bound to attend "the usual classes," and must produce yearly to the Faculty certificates from the respective Professors of his due attendance, and the diligent prosecution of his studies. Candidates are referred for information to the Clerk to the Faculty of Advocates, Advocates' Library.

XIII. The *Bryson* Bursars must pass the Preliminary Examination or its equivalent, and are first to enter the Humanity class: afterwards to pass through the rest of the classes in Arts until their Laureation; at which time, if judged by the ministers of the Presbytery of Dunbar fit for the study of Theology, they may continue for two years in Theology.

XIV. The *Pringle and Wardrop Bursary.*—The Bursar must pass the Pre-

liminary Examination or its equivalent, and attend the classes in the Curriculum in Arts for M.A.

XV. The *Brown Bursaries* are payable to Bursars who must pass the Preliminary Examination or its equivalent, and attend the regular course of study in Arts for M.A.

XVI. The *Mitchell and Shortt Bursary* is payable to a Student who must pass the Preliminary Examination or its equivalent, during the regular course in the Faculty of Arts.

XVII. *Dundas Bursaries.*—By Ordinance No. 78 of the Universities' Commissioners, each person presented to either of the Dundas Bursaries is entitled to hold the same for four years as a Student of Arts, subject to the conditions that he shall pass the Preliminary Eamination or its equivalent, and proceed through the Curriculum in Arts, and shall regularly pass the Examinations required for M.A. These Bursaries cannot be held with any other Bursary in the University.

XVIII. The *Fraser Bursaries.*—Bursars must pass the Preliminary Examination or its equivalent, and proceed through the curriculum till they finish their course and take the Degree in the Faculty of Arts. The Bursaries are held for three years thereafter; the Bursars making their election whether to follow Divinity, Law, or Medicine. Two Classes at least must be attended each Winter Session. Candidates should apply to the City Clerk, Council Chambers, Edinburgh.

XIX. The conditions of the *Hume Mortification* correspond with those of Bryson's, No. XIII., and the presentations and payments are made as in that case.

XX. *Millar Bursary*.—To be held by a Student intended for the Ministry in the Church of Scotland, during his Curriculum in the Faculty of Arts. Bursar must pass the Preliminary Examination or its equivalent.

XXI. The *Grant Mortification*. Tenable in the Faculties of Arts, Divinity, Law, or Medicine. Application for information may be made to Messrs Mackenzie, Innes, & Logan, W.S., 23 Queen Street, Edinburgh. *Bursars*—1894, Alexander Grant, Donald Grant.

XXII. *Stuart Bursaries.*—Open to Students entering upon the second year of their course for graduation in Arts or in Pure Science. The said Bursaries shall be tenable for three years, provided that if the holders graduate at the end of their second year of tenure they shall only retain their Bursaries during the third year of tenure if they engage in a course of study approved by the Senatus Academicus in subjects included in the Curriculum for Degrees in Arts or in Pure Science. *Bursars*—1894, Alexander Brown; 1895, D. H. Macgregor.

XXIII. *Menzies.*—These Bursaries, four in number, were founded in 1837 by James Menzies, Esq., Glasgow. They are of the annual value of £45 each, but vary in amount at discretion of the patrons, and tenable for four years, in any one of the Universities of St Andrews, Glasgow, or Edinburgh. Preference first to the relations of the Founder; next, to the name of Menzies; failing whom, to persons born on the estate of Sir Robert Menzies, Bart., within the parishes of Dull, Weem, and Fortingall; failing whom, any Student who shall be found best qualified may be appointed. Candidates must pass the Preliminary Examination.

XXIV. *The Dow Bursaries* are tenable for four years, "at any of the Scottish Universities, St Andrews in preference." Apply to the Patrons.

XXV. The *Blair* Bursar must pass the Preliminary Examination, attend the Classes, and pass the Examinations necessary for the Degree of M.A. *Bursar*—1895, A. A. Fraser.

XXVI. The *Jamieson Bursary* is for the benefit of the sons of schoolmasters, farmers, mechanics, and labourers, born and residing within any one of the following parishes—viz., Crawfordjohn, Crawford, united parishes of Lamington and Wandell, united parishes of Wiston and Roberton, Culter and Biggar. The Bursar must pass the Preliminary Examination or its equivalent. He may attend Classes in any of the Faculties. *Bursar*—1893, G. C. Rankin.

XXVII. Called the "*Jardine Bursary*," being founded by Mr Bidder, C.E., as a memorial of the munificence of Sir Henry Jardine to him, to which he owed the advantage of his education at the University of Edinburgh. Candidates must be natives of Scotland. The Bursar must pass the Preliminary Examination or its equivalent, and attend the Classes, and pass the Examinations necessary for the Degree in Arts. *Bursar*—1892, John S. Begg.

XXVIII. *Lennie Bursaries.*—Bursars must pass the Preliminary Examination or its equivalent, and attend the Classes in the Arts Curriculum. Candidates should apply to the City Clerk, Council Chambers, Edinburgh.

XXIX. *Bruce Bursaries.*—Prior to the commencement of each Winter Session, five Students are presented yearly, the most distinguished of the five receiving the £40 Bursary. The Bursars must be in regular attendance on the Classes necessary for the Degree of Master of Arts. Candidates announce their names at the Council Chambers to the City Clerk.

XXX. The *M'Diarmid Bursary* is a memorial of the late John M'Diarmid, Esq., Editor of the *Dumfries and Galloway Courier*. Candidates must be natives of the county of Dumfries or the stewartry of Kirkcudbright. The Bursar must pass the Preliminary Examination and attend the Classes and Examinations necessary for the Degree of Master of Arts. Applications regarding the Bursary to be made to "H. Gordon, Esq., Dumfries." *Bursar*—1895, J Nivison.

XXXI. The *Patrick Bursaries* are for the assistance of those who have completed a course of education at any of the public schools or academies in the county of Ayr, where a course of Classical Study is pursued. Their value fluctuates, being the dividend on £3000 Glasgow and South-Western Railway Stock. The Bursars must attend the Classes and pass the Examinations necessary for the Degree in Arts, in the order required by the Faculty. *See* p. 197 of CALENDAR for 1865-66. *Bursars*—1894, 1st, James M. Dunnett; 2nd, John Millar.

XXXII. *Ayrshire Club Bursaries.*—Awarded after competitive examination to natives of Ayrshire requiring aid, and tenable during the Curriculum in Arts, on condition of regular attendance at the Classes, with a view to the Degree. Information will be afforded by the Secretary of the Club, Mr Andrew White, W.S., 23 Castle Street.

XXXIII. *Peeblesshire Bursary.*—Open to Candidates of either sex who intend to pursue the Curriculum in Arts, Science or Medicine. Apply to the Secretary of the Society, Mr P. H. Cosens, W.S., 17 Duke Street, Edinburgh. *Bursar*—1894, Robert Weatherston.

XXXIV. and XXXV. *Caithness and Rhind Bursaries.*—Bursars must attend Classes in Arts Curriculum. Apply to Secretary of the Association.

XXXVI. *Bruce of Grangehill and Falkland's Bursaries.*—Three of these Bursaries, of the annual value of £35, are awarded after competitive examination to Students of the *second* year in their course of study for a Degree in Arts; and three others, of the annual value of £20, to Students entering the *first* year of the Arts Curriculum. *Bursars*—1893, First year, 1894, J. S. Wilson; 1895, J. W. Meldrum; second year, W. D. Ross; 1894, T. S. Macpherson; 1895, A. B. Keith.

XXXVII. *Horsliehill-Scott Bursaries.*—Annual value £33, 6s. 2d., under deduction of £6, 6s. for Examiners' fees from first year's payments. Open to Students in the *third* year of their course for a Degree in Arts, and tenable for two years. The examination is in Classics, Mathematics, and Logic and Metaphysics. Deed of Foundation, at p. 208 of CALENDAR for 1866-67. *Bursars*—1895, C. M. Campbell.

XXXVIII. The *Harrison Bursary* is of the annual value of £35, 5s., under deduction of £6, 6s. of Examiners' fees from first year's payments. Open to Students in the *third* year of their course in the Faculty of Arts, with a view to a degree, and tenable for two years. It is to be awarded to the competitor who shall shew the greatest proficiency in Classics, Mathematics, and Logic and Metaphysics. *See* Deed of Endowment, p. 231 of CALENDAR for 1867-68. *Bursar*—1895, S. G. Campbell.

XXXIX. *Spence Bursaries.*—By the regulations of the Governors, two Bursaries, each of the annual value of £30 for the first year and £40 for second year of tenure, are open only to Students who have studied in the University of Edinburgh, at the commencement of their second session in a three years' curriculum, or of their third session in a curriculum of four years. Examination in Latin, Greek, and Mathematics. Governors may award to any Bursar who has graduated or passed all the examinations for a Degree in Arts, a Bursary of £50 for one year, tenable in any of the other Faculties. See Scheme, p. 520 of CALENDAR 1889-90. Candidates apply to Mr Henry A. Patullo, Writer, Bank Street, Dundee, Factor to the Trust, for particulars.

XL. *Border Counties and Sir Walter Scott Bursaries.*—These Bursaries are open to competition by Scholars (women as well as men) who have attended any school in either of the Counties of Roxburgh, Berwick, Selkirk, or Borough of Berwick-on-Tweed, for two complete sessions immediately prior to the time of their examination for the Bursaries. The Bursars must attend the classes necessary for a Degree in Arts. Application to be made to Mr T. Usher, Sheriff Court House, Edinburgh. *Sir W. Scott Bursar*—1889, John Henderson. *Border Counties Bursar*—1891, John K. Graham.

XLI. *Argyllshire Bursary.*—Candidates must be natives of Argyllshire, Bute, or Western Islands. The holder must attend the classes necessary for a Degree in Arts. Application to be made to John Maclachlan, Esq., W.S., 48 Castle Street, Edinburgh.

XLII. *Ardvorlich Bursary.*—Open to Students of Arts, natives of the parishes of Comrie, Balquhidder, Callander, or Killin, failing whom, to natives of Perthshire, and failing such, to the best qualified candidate. The holder must pass

the Preliminary Examination or its equivalent, and must attend Arts or Science classes. Application to be made to the Clerk of Senatus. For remodelled Foundation, see CALENDAR 1887-88, p. 501; for original deed, see p. 275 of CALENDAR for 1870-71. *Bursar*—1894, E. R. J. Stevenson.

XLIII. *Ceosan Bursary.*—Candidates must be about to enter the Curriculum in Arts. Annual value for first two years £30, and £20 for third year, to be held alternately at Edinburgh and Glasgow Universities. Information will be afforded by J. G. M'Skimming, Esq., Ayr.

XLIV. *Sibbald Bursaries.*—The Bursaries are available to Students in the Faculties of Arts, Medicine, Law, or Divinity, and are open to Students entering the University who have not previously attended any University in the United Kingdom or elsewhere, *and who do not hold any other Bursary or Scholarship;* but no objection to a Candidate that he has, during the previous Summer Session, attended any of the Classes in the University of Edinburgh required by the Faculties of Medicine or Law. *See* CALENDAR for 1888-89, pp. 171 and 177. Application to be made to Messrs Mackenzie, Innes, & Logan, W.S., 23 Queen Street, Edinburgh. *Bursars*—1892, William Eggeling, Donald Banks, William Porter; 1895, R. C. S. Keith.

XLV. *The Angus Club Bursary.*—Open to Forfarshire students entering the University for the first time. Application should be made to the Secretary of the Club, Mr William Whyte, S.S.C., 4 Albyn Place.

XLVI. *Orkney and Zetland Bursary.*—Open to first year Students (male or female), natives, or children of parents who are natives of the County of Orkney and Zetland. It is tenable for three years. The Bursar must attend the Classes in the Curriculum in Arts, with a view to a Degree. Applications to be sent to Messrs Dundas & Wilson, C.S., 17 St Andrew Square, Edinburgh. The Deed of Foundation will be found in CALENDAR for 1873-74, p. 329. *Bursar*—1895, J. S. Ross.

XLVII. *Grierson Bursaries.*—Four Bursaries of £20 each, and one of £24, awarded annually in November, under the patronage of the Senatus. They are restricted in the first place to natives of either of the parishes of Crawford or Leadhills, who must pass an examination, satisfactory to the Senatus, in Elementary Latin, English, and Arithmetic. In the event of more than one preferential Candidate, the examination is competitive among such candidates. If no preferential Candidates, the Bursaries are thrown open for competition to all Students then intending to enrol in the University for the First Session of the Curriculum in Arts, the subjects of examination being those prescribed for Bursars of the First Year. *See* Trust Disposition of Founder at p. 335 of CALENDAR for 1873-74, and p. 368 of the CALENDAR for 1877-78. *Bursars*—1893, William A. Curtis, James Lornie; 1894, T. W. Stewart (Preferential Candidate), A. J. Black (for two years); 1895, James Crerar, J. S. Ross.

XLVIII. *Lanarkshire* (Upper Ward of) *Bursaries.*—Bursars must attend the Classes in the Arts Curriculum. Mr R. Brown, Secretary, 28 St Andrew Square. *Bursar*—

XLIX. *Johnstone of Harthope Bursary.* Natives of Moffat, Peebles, and Students of the name of Alexander or Johnstone preferred, if applications (with proof of birth) be made to Secretary of Senatus before 1st of September. The

successful candidate must attend the Classes in the Faculty of Arts, and take the Degree of M.A. *See* Deed of Foundation, at p. 350 of CALENDAR for 1875-76. *Bursar*—1895, D. D. Paton.

L. *Lambert Bursary.*—This Bursary cannot be instituted until after the death of an annuitant. *See* Deed of Foundation, at p. 342 of CALENDAR for 1875-76.

LI. *Marshall Bursary.*—Restricted in the first place to relatives of Founder, next to Students of the name of Marshall, and natives of West Lothian. *See* Deed of Foundation, at p. 347 of CALENDAR for 1876-77. *Bursar*—1892, John Chalmers.

LII. *Fothringham and Forrest Bursaries.* Relatives or namesakes of the Founder, then such as are of the name of Forrest, to be preferred. The successful candidate must attend the Classes in the Faculty of Arts, and take the Degree of M.A. *Bursar*—1893, Charles Macfie Campbell; 1894, Donald Banks.

LIII. *Earl of Zetland's Bursaries.*—These Bursaries are open to First Year Students in the Faculty of Arts, who are natives of the Islands or County of Orkney and Zetland, or children of parents, one or both of whom shall have been born in or connected for a long period of years with the said Islands or County. For Deed of Foundation of these Bursaries, *see* p. 373 of CALENDAR for 1877-78. Application to be made to Messrs Dundas & Wilson, C.S., 17 St Andrew Square, Edinburgh.

LIV. *Edinburgh East Lothian Association's Bursary.*—The Bursary may be competed for by any lad under the age of 18, who has been educated at any school in East Lothian, or who, having passed through all the standards or their equivalents at such schools, shall have afterwards attended for not more than three sessions any secondary school within or without the county. Application may be made to J. Purves, S.S.C., 65 Frederick Street.

LV. *Edinburgh University Endowment Association's Bursaries* are open to Students entering the Faculty of Arts for the first time, and tenable for three years. Bursars must proceed through the Curriculum in Arts, and pass the Examinations for the Degree of M.A. Lapsed Bursaries may be awarded for one year to Students of the first or any year, whose merits have been attested in the usual Bursary Examination of their year. Cannot be held with any other Bursary in any Scottish University. *See* Minute of the Endowment Association, p. 375 of CALENDAR for 1878-79. *Bursars*—1893, Otto Rothfeld, Sidney G. Campbell, James G. S. Jamieson; 1894, Herbert Smiles; 1895, J. H. Imrie, H. F. Eggeling, W. N. Walsh.

LVI. *Gillan Bursaries.*—Founded in 1878 by James Gillan, draper, Forres. These Bursaries are for the support at the University, and at the New College, Edinburgh, of two young men connected with the parish of Forres, and one connected with Dyke, who have declared their intention to study for the ministry of the Free Church of Scotland. For particulars apply to Messrs R. & R. Urquhart, Solicitors, Forres.

LVII. *Thomson Bursaries.*—Candidates of the name of Thomson or Traquair, or natives of town or county of Dumfries or city of Edinburgh, preferred. *See* Deed of Foundation, p. 367 of CALENDAR, 1877-78, and Scheme of Allocation, p. 346 of CALENDAR, 1879-80. Applications to be made to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street. *Bursars*—1892, Robert Gray; 1893, Allan W. C. Menzies; 1894, Victor Caldwell; 1895, H. C. Liddell.

LVIII. *Patterson Bursary, in Anglo-Saxon, Grammar, and Literature.*—Open to Students in the second, third, or fourth year of their Matriculation who have attended the class of English Literature in the University. The Examination will include Anglo-Saxon, Grammar, Translations of passages of Anglo-Saxon prose and verse, and the History of Anglo-Saxon Literature. *See* Deed of Foundation at p. 379 of CALENDAR for 1880-81. *Bursar*—1894, D. N. Smith.

LIX. *John Welsh Bursaries*, founded by Thomas Carlyle in 1881, in memory of his Father in-law, to whom the estate of Craigenputtock in Dumfriesshire, bequeathed by Mr Carlyle to the University of Edinburgh, formerly belonged. The Bursaries are paid from the rents of that estate, and are eight in number, of the value of about £20 each, tenable for four years. They are awarded, after competition, to Students entering the University, who have not studied in any other University. Four are to be given to the competitors most proficient in Mathematics, and four to those most proficient in Classics. They are not to be held with any other Bursary. *See* Deed of Foundation at p. 379 of CALENDAR for 1881-82. *Bursars*—(*Classical*)—1894, David L. Norrie, J. H. Cattanach, B. H. Richardson, C. G. Mackay. (*Mathematical*)—1892, William Dick, A. M. Anderson; 1895, R. H. Macnair, Alexander Waddell.

LX. *Mackinnon Bursaries.*—Three Bursaries about £18, 15s., tenable for three years, to encourage the study of the Mechanical Sciences. Each Bursary is open for competition to Students entering their First Session in the Faculty of Arts. Candidates must be natives of the counties of Argyll, Bute and Arran, Inverness, Ross or Sutherland, and must be able to speak the Gaelic language. The Examination is held at the annual competition for Bursaries at the beginning of each Session, with an additional examination by the Professor of Celtic; at least 10 per cent. of the total marks attainable being assigned to Gaelic. Each Bursar is bound to attend at least two classes in the Faculty of Arts during his tenure, and among these six classes, at least one class of Mathematics, one of Natural Philosophy, and the class of Engineering. The Bursaries cannot be held along with any other Bursary, Scholarship, or Fellowship in a Scottish University, or with any office yielding an annual income of £50 or upwards, and is tenable only during good behaviour and proficiency. *Bursars*—1894, Roderick Macleod; 1895, J. M. Lamont.

LXI. *Whitelaw Bursaries.*—In memory of James Whitelaw, Watchmaker. Three Bursaries, about £23 each, tenable for three years, open to Students about to enter, or who follow the Curriculum in Arts. Cannot be held along with any other Bursary, Scholarship, or Fellowship in a Scottish University, or with any office yielding £50 annually, or upwards. Examination in October annually. *Bursars*—1894, S. A. K. Wilson; 1895, T. B. Copeland.

LXII. The *Renton Bursary*, founded by the Trustees of the late William Renton, 20 Royal Terrace, Edinburgh, is for a Student pursuing his studies in the classes of Natural Philosophy, Mathematics, Chemistry, and Political Economy, or such of them as he may consider proper, and who may require assistance. The Bursary is tenable for one year, and cannot be held by any one under the age of sixteen or above twenty-one. It is filled up in November

each year. The Examination is conducted each year by the Assistant to one of the Professors of Natural Philosophy, Chemistry, and Mathematics in turn, and in the above-named order. *Bursar*—1895, James T. Young.

LXIII. The *Macdougall Bursaries* are open to Students of Edinburgh, Glasgow, and St Andrews Universities. Students attending the Gaelic Class to be preferred. The Bursaries cannot be held with any Bursary or appointment yielding £50 per annum. *See* Deed of Foundation at p. 435 of CALENDAR 1885-86. Application may be made to Mr W. C. Young, solicitor, Perth.

LXIV. *Newton Bursaries.*—Two are awarded annually, one to the most distinguished Student in the Junior Class of Natural Philosophy, and one in the Senior (Second) Class of Mathematics. The Bursaries are tenable for two years, and the Bursars must continue their studies in the higher branches of the subjects of their Bursaries, and at the end of the second year of tenure, either take Honours in Mathematics and Natural Philosophy, pass the 2nd B.Sc. Examination, or give other evidence of advanced study in Mathematics or Natural Philosophy. These Bursaries are not to be held with other Scholarships or Bursaries. *See* Deed of Foundation, p. 460 of CALENDAR, 1886-87. *Bursars* (*Math.*)—1895, J. B. Meiklejohn; 1896, Robert Horn. (*Nat. Phil.*)—1895, E. M. Anderson; 1896, *R. L. Wilson.*

LXV. *Mann Bursaries.*—(1.) Candidates must be children of residents in the town of Nairn, *i.e.*, one or both parents must have resided within the municipal boundaries for at least twelve months at any period prior to the competition. (2.) Applications must be lodged with the Clerk of Senatus at least three weeks before the Annual Bursary Examination of the University, along with evidence of compliance with Rule I. (3.) One will be awarded annually to the candidate, matriculating for the first time in this University, who obtains the highest marks at the Entrance Bursary Examination in English, Latin, Greek, and Mathematics, provided the Examiners be satisfied with the standard he has attained. (4.) Each will be tenable for three years, value about £25 per annum. (5.) Failing candidates of the first year, the vacant Bursary will be awarded as a second year Bursary to the candidate who obtains the highest marks in the Bursary Examination for the second year; and, failing candidates of the first and second years, it will similarly be awarded as a third year Bursary. When awarded under this Rule it is tenable for one year only. (6.) Failing candidates qualified under Rule III. or Rule V., the Senatus may continue one of the Bursaries to its holder for a fourth year, provided he propose to continue his studies for a fourth year in some special subject. (7.) Each Bursar must be *bona fide* engaged in studying for a Degree in Arts or in Science, and must produce evidence at the end of each Winter Session that he has attended at least two classes in the Faculty of Arts, or in a Department of Science, and has made reasonable progress in his studies. (8.) Any breach of these regulations, or conduct unworthy of a scholar and a gentleman, will be punished by forfeiture of the Bursary. *See* Deed of Foundation, p. 497 of CALENDAR 1887-88, and Regulations at p. 544 of CALENDAR for 1890-91. *Bursar*—1893, John Matheson.

LXVI. *Allan Bursaries.*—These Bursaries are available to Students attending classes in any of the Faculties of Arts, Medicine, or Law, in the Univer-

sity of Edinburgh, or to Students attending the classes in said University necessary for Degrees in Science; and are tenable for three years or for such part of that period as the Bursar shall remain a Student at the University. In nominating Candidates for presentation to the Bursaries, care will be given to prefer such as have been born in the parish of Kelso, provided they are qualified by their previous education for entering the University. Apply to P. Stormonth Darling, Esq., writer, Kelso.

LXVII. *James Fairbairn Bursary*, founded by Mrs Kidd of Palmyra, Aigbarth, near Liverpool, in memory of James Fairbairn, late Governor of Heriot's Hospital, is open to competition to first year Students, and is tenable for four years. The Bursar is required to attend the Classes necessary for Graduation in Arts, and to take the Degree at the end of the Course. The Bursary cannot be held along with any other Bursary or Scholarship. *See* Deed of Foundation, p. 501 of CALENDAR, 1887-88. *Bursar*—1893, Peter Thomsen.

LXVIII. *Jardine of Thorlieshope Bursaries.*—Natives of the rural districts of Roxburghshire and Dumfriesshire (villages and towns of the population of 2000 and upwards being excluded), who have attended the Public or Board Schools in said counties, to be preferred. In the event of there being no first year Candidates, the Bursaries will be thrown open to Candidates of the second, third, or fourth year in succession, but will be tenable for one year only. The Bursars are required to attend the Classes necessary for Graduation in Arts, and to take the Degree at the end of the Course. The Bursaries cannot be held along with any other Bursary or Scholarship. See Deed of Foundation, p. 497 of CALENDAR, 1887-88. *Bursars*—1892, W. W. Smith; 1893, Richard Bell; 1894, John Pattison, Arch. S. Ballantyne; 1895, Walter Davidson.

LXIX. *The Glenbuck Bursary* may be held by a Student in any of the four Scotch Universities—preferably that of Glasgow or of Edinburgh. Candidates only are eligible who have resided not less than five years in the Parish of Muirkirk, and who have received part of their education at any school therein, or alternatively and postponed thereto, those who have been resident in any one of the Parishes of South Ayrshire for not less than five years, and who have received part of their education in any school in the same Parish. For urther particulars, apply to R. A. Leslie, Inspector, Muirkirk.

LXX. *MacKenzie* (*Stornoway*) *Bursary.* — Candidates of the name of MacKenzie have a preference. The Examination is in English, Latin, Greek, and Mathematics, as for First Session Open Bursaries, and the Bursary will be awarded to the Candidate who stands highest, provided he has passed the Preliminary Examination in at least two subjects, one of which must be Latin, Greek, or Mathematics on the Higher Standard. Failing a preferential Candidate, the Bursary will be thrown open to competition as a first year Bursary in Arts. The Bursar is required to attend the Classes necessary for Graduation in Arts, and to take the Degree at the end of the course. For Regulations, *see* CALENDAR for 1895-96, p. 748.

LXXI. This Bursary, tenable for four years, is by the will of the founder to be called the "Maclaurin Bursary," and is restricted to Students of the Founder's name of Maclaurin (or in Gaelic orthography "Maclalhria"). The holder must

pass the Preliminary Examination. It may be held in any of the Faculties. *See* Deed of Foundation, p. 544 of CALENDAR for 1890-91.

LXXII. Six Bursaries, each of the annual value of £25, and tenable for three years in the Faculty of Arts. They are open to Students who, having passed the Preliminary Examination, are entering on the first year of the Course in Arts, and are studying for the Ministry of the Church of Scotland. For conditions of tenure and subjects of examination, apply to the Rev. Dr Langwill, Currie, or to Rev. Dr Patrick, Greenside, Edinburgh. *Bursars*—1894, Thomas J. Barnett, Henry Duncan, W. MacKean; 1895, W. Murdie, G. H. Donald.

LXXIII. *Bailie Cousin's Bursary* is open for competition to Students entering the Faculty of Arts on a regular course for the Degree of M.A. The holder must regularly pass the departmental examinations appropriate to each year. The Bursary cannot be held along with any Fellowship, Scholarship, or Bursary of any Scottish University, or with any situation or appointment yielding an annual income of £30 or upwards. For Deed of Foundation *see* CALENDAR 1891-92, page 536. *Bursar*—1894, William Dunbar.

LXXIV. *Maule Bursaries.*—These Bursaries are for the education of poor and deserving Students. They may be held by Students prosecuting their studies in any of the Faculties. The Examination is in Latin, Greek, Mathematics, and English for preferential Candidates. *See* Excerpt from Trust Deed, p. 543 of CALENDAR for 1891-92, and Deed of Foundation, in CALENDAR for 1894-95. *Bursars*—1894, David Robertson (six years), Donald J. Boyd (five years), Richard H. Moar (four years), W. A. G. Fallas (three years).

LXXV. *The Donald Fraser Bursary* is awarded for high merit in the University Class of Natural Philosophy, combined with proficiency in Laboratory Work. The Bursar is required to give assistance in the University Physical Laboratory, and to engage in research there. The Bursary cannot be held along with any other Fellowship, Scholarship, or Bursary in any Scottish University. *See* Deed of Foundation, p. 545 of CALENDAR for 1891-92. *Bursar*—1896, *G. Ednie.*

II.—PRIZES.

I.—THE LORD RECTOR'S PRIZE.

The Lord Rectors since 1879 have, during their respective tenures of office, offered a Prize of Twenty-five Guineas annually, for the best Essay on a Historical Subject.

1895. *J. C. Menmuir.*

II.—EDINBURGH UNIVERSITY CLUB (OF LONDON) TRIENNIAL PRIZE.

A Prize of Twenty Guineas, open triennially, for competition in any of the Faculties by Graduates of not more than two years' standing, is offered by the Edinburgh University Club of London, for the

best Essay on a subject prescribed by the Deans of the Faculties in rotation, subject to the approval of the Senatus. The Prize will be open in 1897.

1895. *Robert Hutchison, M.B.C.M.*

III.—BRUCE OF GRANGEHILL AND FALKLAND'S PRIZE IN THE CLASSES OF LOGIC AND METAPHYSICS.

This Prize of £20 (with a supplementary Prize of £10 for the Junior Division of the Class) is awarded to the most distinguished student in this class, "on such conditions and competition as the Professor may direct, and on his decision," for excellence in the study of Logic and Metaphysics. It was founded in 1865, by Mrs Tyndall Bruce of Grangehill and Falkland, in commemoration of John Bruce, Professor of Logic and Metaphysics in the University, 1774-1786.

1896. *Frances H. Melville.*

IV.—GRAY PRIZES.

The Gray Prize Essay Fund was instituted in 1851, in terms of the Will of Simon Gray, Esq., of Mornington Crescent, London. The Trustees offer annually for competition, two prizes of £20 for the first, and £10 for the second best Essay on a subject to be intimated annually under Prizes open for the year. For particulars apply to the Rev. W. D. Herald, Duns, Secretary to the Trustees.

1895. 1st Prize, Henry M'Arthur, Edinburgh.
2nd Prize, Archibald Scott Ballantyne, Galashiels.

V.—DR MUIR'S PRIZES IN SANSKRIT AND COMPARATIVE PHILOLOGY.

In accordance with the intentions of the late Dr John Muir, and with the concurrence of Sir William Muir, the sum of £100, offered by Dr Muir in 1872 as a prize to the first candidate who should take the degree of Doctor of Science in Sanskrit and Comparative Philology within five years,—afterwards renewed, on the same terms, for another period of five years,—has now, together with the interest, been appropriated by the Senatus for Sanskrit and Comparative Philology Class Prizes. It is left to the discretion of the Professor to offer Class Prizes, not exceeding £25 in the aggregate, for competition.

1896. 1st Prize, *W. D. Proudfoot.*
2nd Prize, *S. G. Campbell.*

VI.—SCOTT AND DUNBAR PRIZE.

This Prize, of the value of about £20, was founded in 1872 by the Rev. Hew Scott, D.D., of Anstruther Wester, for encouraging the study of the Greek Language in the University of Edinburgh. It is awarded annually to "the most deserving and learned student in the

Greek Classes," after such Examination as may be directed by the Principal and the Professors of Divinity, Greek, and Humanity. *See* Deed of Foundation at p. 332 of CALENDAR, 1873-74.

1896. *Arthur B. Keith.*

VII.—THE COUSIN PRIZE.

This Prize, founded in connection with the Class of Fine Art by the late David Cousin, Esq., is of the annual value of about £14, 14s. 6d., and is awarded at the close of each session for proficiency in Class Essays set from time to time by the Professor. *See* Excerpt from Mr Cousin's will in CALENDAR, 1880-81, p. 380.

1896. *Thomas J. Burnett.*

VIII.—KELLAND MEMORIAL PRIZE.

The Committee for promoting a Memorial to the late Professor Kelland has handed over to the University the sum of £147, 10s., for the purpose of founding a Prize to be called the "Kelland Memorial Prize," to be awarded annually to the most distinguished Student in Pure Geometry in the Junior Mathematics Class.

1895. *Alexander Sharp.*

III.—SCHOLARSHIPS.

I.—PITT CLUB CLASSICAL SCHOLARSHIP.

The Pitt Club Scholarship of the annual value of £57, 10s. 4d., tenable for four years. By ordinance No. 17 of the Scottish Universities' Commissioners of 1858 it is open for competition to all who have passed regularly through the Course in Arts in the University, and have been admitted to the Degree of M.A. in Edinburgh, at any time within four years before the competition takes place. The subjects embraced in the examination are CLASSICS and ENGLISH LITERATURE. The next competition may take place in April 1897.

1892. *Thomas Ross Mills, M.A.*

II.—MACKENZIE CLASSICAL SCHOLARSHIP.

This Scholarship was founded in 1862, by James Mackenzie, Esq., W.S., and is of the annual value of £121, 10s., tenable for four years. By ordinance No. 90 of the Scottish Universities' Commissioners of 1858, it is open for competition to all Graduates in Arts in the University of Edinburgh of not more than three years' standing at the time of the competition. Candidates are examined in CLASSICAL LITERATURE and in ENGLISH LITERATURE, and the Examination is conducted by three or more Examiners selected by the Senatus from their own body. It cannot be held along with any other Scholarship, Fellowship, or Bursary, of any Scottish University. The Examinations include—1. Translations from Latin and Greek authors; 2. Composition in Latin and Greek Prose; 3. Latin and Greek Literature, and

History; 4. English Essay-Writing; 5. History of English Literature. The next competition may take place in April 1897.

1892. *William G. Wedderspoon, M.A.*

III.—SIR DAVID BAXTER MATHEMATICAL SCHOLARSHIP.

This Scholarship, founded by Sir David Baxter, Bart., of Kilmaron, is of the annual value of £61, 15s. 10d., and is tenable for four years. By the terms of the Deed of Foundation (given in the CALENDAR for 1864-65, p. 171) it is awarded for proficiency in the department of Mathematics, particularly in that branch of it which includes mechanical and physical science. Competitors must be Graduates in Arts of the University, of not more than four years' standing at the time of the competition, who have taken Honours in the department of Mathematics. The next competition may take place in April 1900.

1896. *Malcolm C. M'Alpin, M.A.*

IV.—SIR DAVID BAXTER PHILOSOPHICAL SCHOLARSHIP.

This Scholarship, also founded by Sir David Baxter, Bart., of Kilmaron, is of the annual value of £61, 15s. 10d., and is tenable for four years. By the terms of the Deed of Foundation (given in the CALENDAR for 1864-65, p. 171), it is awarded for proficiency in the Department of Mental Philosophy. Competitors must be Graduates in Arts of the University, of not more than four years' standing at the time of the competition, who have taken Honours in the department of Mental Philosophy. The subjects of examination are Logic, Metaphysics, and Moral Philosophy. The next competition may take place in April 1899.

1895. *J. B. Baillie, M.A.*

V.-VII.—JOHN EDWARD BAXTER SCHOLARSHIPS.

These Scholarships were founded in 1876, and are three in number, each of the annual value of about £85, 13s. 6d., and tenable for three years. One is in the Department of Classical Literature, another in Mental Philosophy, and the third in Mathematics and Natural Philosophy. They are open for competition to all Masters of Arts of the University of not more than three years' standing at the time of the competition. The Scholarship in Mental Philosophy may be in April 1897, and those in *Mathematics* and in *Classics* may be open in April 1899. *See* Deed of Foundation at p. 361 of CALENDAR for 1877-78.

1896. *W. D. Ross, M.A.* (Cl.)
John A. Macdonald, M.A., B.Sc. (Math.).

VIII.—DRUMMOND MATHEMATICAL SCHOLARSHIP.

This Scholarship was founded in 1865 by Miss Elizabeth Drummond, in memory of her brother, Captain Drummond, R.E., Under Secretary for Ireland. It is of the annual value of £105, 5s., and is ten-

able for three years. By the Deed of Foundation (given at p. 198 of CALENDAR for 1865-66), it is open to Graduates in Arts of not more than three years' standing, who have graduated with Honours in the Department of Mathematics. It cannot be held with any other Bursary or Scholarship, and the holder is recommended to travel for the purpose of inspecting, in this and other countries, remarkable engineering and architectural structures, to extend his knowledge of the practical application of Mathematical principles; and, if required by the Senatus Academicus, to deliver reports on the principal structures examined by him, and the Mathematical principles exemplified thereby; which reports the Senatus may cause to be publicly read in the University or elsewhere in Edinburgh. The next competition may take place in April 1897.

IX.—BRUCE OF GRANGEHILL AND FALKLAND'S CLASSICAL SCHOLARSHIP.

This Scholarship, founded in 1865 by Mrs Tyndall Bruce of Falkland, is of the annual value of £100, and is tenable for three years, during two of which the studies of the Scholar must be prosecuted in the University of Edinburgh, but in the third year they may be prosecuted in an English or Foreign University. By the terms of the Deed of Foundation (given at p. 205 of the CALENDAR for 1866-67), this and the two following Scholarships held by Students who have passed their Examinations for the Degree of Master of Arts with Honours, have hitherto been conferred upon the most distinguished in that one of the Honours Departments which is appropriated for each year. The Scholarship cannot be conferred upon any one whose age exceeds twenty-three years, and it cannot be held with any other Scholarship or Fellowship of a Scottish University, or with any situation yielding an income of £100 per annum. In the event of the Scholarship becoming vacant during the period of tenure, through resignation or otherwise, of the Scholar, then the sum falling in shall be bestowed by the Senatus for the remaining period of tenure on a Student attending the Divinity Classes who shall be reported by the Faculty of Theology to be a meritorious Student and deserving of the Scholarship. The next award may be made in April 1899.

1896. *Marshall W. G. Gray, M.A.*

X.—BRUCE OF GRANGEHILL AND FALKLAND'S SCHOLARSHIP IN MENTAL PHILOSOPHY.

This Scholarship, founded in 1865 by Mrs Tyndall Bruce of Falkland, is of the annual value of £100, and is tenable for the same period, and under the same conditions as the preceding. The subjects of examination are Logic and Psychology, Metaphysics, Moral Philosophy, and History of Philosophy. The next award may be made in April 1898.

1895. *J. Macaskill, M.A.*

XI.—BRUCE OF GRANGEHILL AND FALKLAND'S MATHEMATICAL SCHOLARSHIP.

This Scholarship, founded in 1865 by Mrs Tyndall Bruce of Falkland, is of the annual value of £100, and is tenable for the same period, and under the same conditions as the preceding. The subjects of examination are Mathematics and Natural Philosophy. The next award may be made in April 1899.

1896. *Andrew C. Smith, M.A.*

XII.—GRAY SCHOLARSHIP.

This Scholarship, founded by Mr Gray of Baad Park in 1864, is of the annual value of £86, 15s. 6d., and tenable for two years. It is awarded for distinction in one of the Honours groups of subjects for the Degree of Master of Arts, or in one of the groups of subjects for the Final Examination for the Degree of Bachelor of Science, or in the Historical and Philosophical subjects of the examination for the Degree of Bachelor of Laws, or to Students in the Faculty of Divinity for distinction in the Final Examination for the Degree of Bachelor of Divinity. It has been resolved that the Scholarship shall be offered in rotation in the Faculties of Arts, Science, Law, and Divinity. When it falls to the Faculty of Arts it will be offered in rotation in the order of the groups of Honours subjects in the Arts regulations, and when it falls to the Faculty of Science, it will be offered in one of the groups of the Second Science Examination. When not awarded in the Faculty in which it is offered, it will then be offered to the other Faculties in rotation. The first award may be made in April 1897. The holder of the Scholarship is required, as a condition of tenure, to satisfy the Senatus Academicus that he is pursuing special higher studies, or that he is engaged in original research, either in the University of Edinburgh or in another University approved by the University Court, and he must also satisfy the Senatus Academicus of the importance of the work he proposes to undertake, and of his qualifications for such work.

XIII.—GILCHRIST SCHOLARSHIPS.

These Scholarships were founded in 1865 by the Trustees of the late Dr Gilchrist; they are three in number, each of the annual value of £100, and are open to natives of India who have passed competitive examinations at the Presidential Colleges of India. They are attached to the Medical, Law, and Literary Classes in the University.

XIV.-XV.—FETTES EXHIBITIONS.

These Exhibitions are each of the annual value of £60, and are tenable for four years. They are open annually for competition, one among the Foundationers alone, and the other among the Foundationers and such other pupils as have attended Fettes College regularly for not less than five years.

XVI.-XVII.—RHIND SCHOLARSHIPS.

These Scholarships were, in accordance with the will of the late A. H. Rhind, Esq., of Sibster, founded by his trustees on the reversion of his estate. They are two in number, one in the Department of Classical Literature, the other in that of Philosophy, are each of the annual value of £88, 7s. 6d., are tenable for not less than two years, or more than three years, and are open to Undergraduates and to Graduates of not more than three years' standing at the time of the competition. Competitors must have attended classes in this University for not less than three *winter* sessions or their equivalent, attendance being defined to mean that the competitors must present Certificates of having attended at least four classes during the period aforesaid, and of having duly performed the work of the classes. The successful Candidates may be required to undertake duties connected with the teaching of the University, or otherwise assist in some department of its operations. *See* Deed of Foundation at p. 323 of CALENDAR for 1874-75. The next competition for the Classical Scholarship may take place in April 1898, and the next competition for the Philosophical Scholarship may take place in April 1899.

1895. J. M. Moore, M.A. (Cl.) | 1896. *Alexander Darroch.*

XVIII.—THE CHARLES MACLAREN SCHOLARSHIP.

This Scholarship, founded in 1871 by the Trustees of Mrs Maclaren, in memory of Charles Maclaren, Esq., the eminent geologist, is of the annual value of £108, 19s. 2d., and is tenable for three years. It is for the encouragement of the study of Mathematics and Natural Philosophy, and is open to all graduates in Arts of not more than three years' standing at the time of the Competition (and under 30 years of age) who shall have taken honours in Mathematics. The successful competitors are to spend a few months in travelling and in examining remarkable Engineering and Architectural Structures, and to report to the Senatus, which report the Senatus may cause to be publicly read in the University. The Deed of Foundation is given at p. 324 of CALENDAR for 1873-74. The next competition may be in April 1899.

1896. *James A. Macdonald, M.A., B.Sc.*

XIX.—NEIL ARNOTT SCHOLARSHIP FOR EXPERIMENTAL PHYSICS.

This Scholarship, value about £38, 10s., was founded in 1874, and is awarded annually to the most distinguished Student in the Physical Laboratory of the University.

The recipient must, during the ensuing Summer and Winter Sessions, assist the Professor of Natural Philosophy in the Laboratory. Failing a Student deemed by the Professor worthy of the Scholarship, it may be given to the Candidate for a Degree in Arts who has undergone the Examination in Natural Philosophy with most distinction. *See* Deed of Foundation, at p. 340 of CALENDAR for 1875-76.

1896. *J. T. Young.*

XX.-XXII.—FERGUSON SCHOLARSHIPS.

The examination of Candidates for Three of these Scholarships, each of the annual value of £80, and tenable for two years, will be held in Glasgow, on Tuesday, 29th September 1896, and following day. One of the Scholarships to be awarded for the greatest proficiency in Classics; one for the greatest proficiency in Mathematics, including Natural Philosophy; and one for the greatest proficiency in Mental Philosophy, including Logic, Psychology, Metaphysics, and Moral Philosophy.

The Competition is open to "all persons who have passed the Examinations required for the Degree of Master of Arts in one of the Universities of Scotland (whether taking the Degree at the same time or not) provided that at the time of the Competition not more than six years have elapsed since the date of their first matriculation after having passed the Preliminary Examination, and who have not already gained one of these Scholarships." Candidates are required to enter their names at the Office of the Ferguson Bequest Fund, 94 Bath Street, Glasgow, not later than 1st September 1896.

For further information apply at the Office of The Ferguson Bequest Fund, 94 Bath Street, Glasgow.

HOLDERS, 1895.

Classical—William Wallace M'Kechnie, M.A. of Edinburgh University.
Mathematical—John Alexander Johnston, M.A. do.
Philosophical—James Black Baillie, M.A. do.

XXIII.-XXXII. REVISED REGULATIONS FOR VANS DUNLOP SCHOLARSHIPS.

(These Regulations will come into effect in October 1897 for all the Scholarships, except in Political Economy, for which they take effect after the Examination in October 1896. For previous conditions of eligibility see former CALENDARS.)

TEN VANS DUNLOP SCHOLARSHIPS, each of the annual value of £100, and tenable for three years, are, by the Deed of Foundation, appropriated to the following subjects:—1. English Literature and Poetry; 2. Classical Learning—Latin and Greek; 3. Commercial and Political Economy and Mercantile Law; 4. Logic and Metaphysics; 5. Natural Philosophy; 6. Mathematics; 7. Hebrew and Oriental (Semitic) Languages; 8. History; 9. Moral Philosophy; 10. Sanskrit and Comparative Philology. In terms of the Trust-Disposition (which is given at p. 380 of CALENDAR for 1880-81), the Scholarships are given only for "distinguished proficiency" in the various subjects of competition, as determined by the Examiners and the Senatus Academicus.

The following are the General Regulations for the Examinations:—

Competitors for these Scholarships must have regularly attended at least one full Course or two Half-Courses in the University of Edinburgh during each Academic year in which they claim to have been

Matriculated Students, and no Candidate is eligible who has discontinued attendance at the University of Edinburgh for more than one year. The years of Academic study count from the first year in which a Candidate has attended one of the classes qualifying for the degree of M.A.

Each Scholarship is tenable on condition that the Scholar submits annually to the University evidence that he is prosecuting his studies, or his professional work, in a manner satisfactory to the Senatus. The evidence may consist of—(1.) Certificates of attendance on Lectures or Laboratories in this or some other University; or (2.) Certificate of having acted as Assistant to a Professor in this or some other University; or (3.) A written Report of work done by the Scholar during the year, together with a Thesis composed by himself on a subject connected with that work.

Not more than one of these Scholarships can be held by the same person, and Vans Dunlop Scholars cannot hold, along with their Scholarship, any other Fellowship, Scholarship, or Bursary in the University of Edinburgh.

Candidates for the Vans Dunlop Scholarships must, on entering for the Examinations, produce evidence that they have fulfilled the conditions of eligibility.

Candidates, if not already matriculated, are required to pay the Matriculation Fee for the year in which the competition takes place.

The names of Candidates highly distinguished in the Vans Dunlop Scholarship examinations may be published.

XXIII.—English Literature and Poetry.

Candidates are subjected to an Examination testing—(1.) Knowledge of the History of English Literature generally, and more particularly through a prescribed period; (2.) Acquaintance with certain books, chiefly of English Poetry, prescribed for special reading; (3.) Ability in English Composition, in the form of an Essay, written in the Examination Room, on some subject of literary criticism.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than five years altogether in this or any other University; and who have given regular attendance in the Class of Rhetoric and English Literature, and in at least one other class on English Language or Literature. The next Competition will take place in March 1897 (under the Old Regulations).

The Professor of Rhetoric and English Literature, and an Examiner appointed by the Senatus, are the Examiners.

1894. Thomas Hart.
Prox. accessit, D. Nichol Smith.

XXIV.—Classical Learning—Latin and Greek.

1. *Latin.*—The Examination will test:—
   (*a.*) Knowledge of Latin books and special subjects previously prescribed.

(*b.*) Power of Latin Composition, and of translating from Latin authors not previously prescribed.

(*c.*) Knowledge of Latin History and Literature.

2. *Greek.*—(*a.*) Knowledge of Greek books and special subjects previously prescribed.

(*b.*) Power of Greek Composition, and of translating from Greek authors not prescribed.

(*c.*) Knowledge of Greek History and Literature.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than four years altogether in this or any other University, and who have given regular attendance in the Latin and Greek Classes necessary for graduation in Arts.

The next Competition will take place in October 1896 (under the Old Regulations).

The Professors of Humanity and Greek are the Examiners.

1893. *W. W. M'Kechnie.*

XXV.—Commercial and Political Economy and Mercantile Law.

The Examination will test knowledge of the subjects assigned in the Deed of Endowment to the Chair of Commercial and Political Economy and Mercantile Law. It will include the subjects embraced in the Lectures, and also in books prescribed from time to time by the Appropriate Board of Studies.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than five years altogether in this or any other University, and who have regularly attended the Class of Commercial and Political Economy and Mercantile Law. The next Competition will take place in October 1890 (under the Old Regulations).

The Professor of Political Economy and an Examiner appointed by the Senatus are the Examiners.

1895. No award.

XXVI.—Logic and Metaphysics.

The Examination will test knowledge of (*a.*) Logic, (*b.*) Psychology, (*c.*) Metaphysics and the History of Philosophy. It will include the subjects embraced in the Lectures on each of these branches; also prescribed Reading and Studies of special subjects.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than four years altogether at this or any other University, and who have completed attendance at the Ordinary Class of Logic and Metaphysics. The next Competition will take place in March 1897 (under the Old Regulations).

The Professor of Logic and Metaphysics and the Professor of Moral Philosophy are the Examiners.

1894. *Hugh R. MacKintosh, M.A.*

XXVII.—Natural Philosophy.

The Examination will test the knowledge of the Candidates in Experimental Physics and Applied Mathematics.

The Competition is open to all who have been Matriculated Students for at least two years in this University, and not more than six years altogether in this or any other University, and who have attended at least two of the classes of Natural Philosophy, of which the Ordinary Course must be one. The next Examination will take place in March 1898.

The Professor of Natural Philosophy and an Examiner appointed by the Senatus are the Examiners.

1895. *J. F. Cameron, M.A.*

XXVIII.—Mathematics.

The Examination will test Candidates in pure mathematical subjects in the Honours Department for the Degree of Master of Arts, and in special subjects to be prescribed by the Examiners from time to time.

The Competition is open to all who have been Matriculated Students for at least two years in this University, and not more than six years altogether in this or any other University, and who have attended at least two of the Mathematical Classes, one of these being an Honours Class. The next Examination will take place in March 1898.

The Professor of Mathematics and an Examiner appointed by the Senatus are the Examiners.

1895. *J. A. Johnston, M.A.*

XXIX.—Hebrew and Oriental (Semitic) Languages.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than six years altogether in this or any other University; and who have attended at least two courses under the Professor of Hebrew and Oriental Languages.

Candidates will be examined in Hebrew, Syriac, and Arabic.

The Examiners are the Professor of Hebrew and Oriental Languages, and an Examiner appointed by the Senatus. The next Competition will take place at the end of Winter Session 1898-99.

1896. *Andrew Tweedie, M.A.*

XXX.—History.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than five years altogether in this or any other University, and who have attended two or more courses of Professorial Lectures on History within the University.

The Examiners are the Professors of History, and such others as may be appointed by the Senatus from time to time. The next Competition will take place in October 1898.

1895. *C. S. Pennell.*

XXXI.—Moral Philosophy.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than four years altogether in this or any other University, and who have completed attendance at the Ordinary Class of Moral Philosophy.

The Professor of Moral Philosophy and the Professor of Logic and Metaphysics are the Examiners. The next Competition will take place in October 1898.

1895. *Alexander Mair.*

XXXII.—Sanskrit and Comparative Philology.

The Competition is open to all who have been Matriculated Students for not less than two years in this University, and not more than six years altogether in this or any other University, and who have attended at least two courses under the Professor of Sanskrit and Comparative Philology.

The Examiners are the Professor of Sanskrit and Comparative Philology, and another Examiner to be appointed by the Senatus. The next Competition will take place in March 1898.

1895. *William Eggeling.*

XXXIII.—SKIRVING SCHOLARSHIP FOR MORAL PHILOSOPHY.

This Scholarship is to be founded (after the death of an annuitant) in accordance with the Will of the late David Skirving, of No. 13 Westbourne Park, London. It will be of the annual value of about £50, and tenable for three years. *See* Deed of Foundation at p. 350 of Calendar for 1876-77.

XXXIV.—LANG SCHOLARSHIPS.

This is a Bequest by the late John Lang, Esq. of Warren Park, Ayrshire, with the object of founding four Scholarships, to be called the "Lang Scholarships," one in Natural Philosophy, one in Mathematics, one in Chemistry, and one in Botany. The capital sum will be payable on the death of the survivor of two liferenters.

XXXV.—MACKAY SMITH SCHOLARSHIP IN NATURAL PHILOSOPHY.

This Scholarship is of the annual value of £25, tenable for two years, and is open for competition to Students who have attended the Class of Natural Philosophy in this University. The successful candidate is required to attend the class of Natural Philosophy, or to prosecute the study of Natural Philosophy, during at least one year of his tenure of the Scholarship, in such way as the Senatus may direct or approve. The next award may be made in April 1898.

1896. *Alexander Brown.*

XXXVI.—SCOTT SCHOLARSHIP.

This Scholarship, of about £30, is awarded annually (a previous holder not being ineligible for re-election), for the purpose of assisting Graduates in Arts of the University, of not more than three years' standing at the date of their election as Scholars, to travel for purposes of Study or Research. Applicants are required to state:—1. The purpose for which they desire to use the Scholarship; and 2. What other means they have towards the object in view. The award will be based—(1) On the importance of the work to be undertaken; (2) the sufficiency of the means proposed to be applied to the work; (3) the capability of the applicant for the work he proposes to undertake. The holders are required in all cases to satisfy the Senatus, by half yearly reports, that they are carrying out the work undertaken; and must present a final report or deliver a short Course of Lectures on their work when completed. The appointment is made by the Senatus on a report by the Faculty of Arts on the merits of the applicants. The first competition will be open to all Graduates in Arts qualified as above, but thereafter preference will be given to Candidates desiring to undertake work in the following groups of subjects, under the following scheme of rotation, provided always that a suitable Candidate presents himself:—(1) Classical Languages and Classical Archæology; (2) Mental Philosophy; (3) Mathematical and Physical Science; (4) Semitic and Indian Languages; (5) English and Modern Languages; (6) History. Next award may be made in April 1897. See Regulations in CALENDAR for 1894-95.

XXXVII.—MACPHERSON SCHOLARSHIP.

This Scholarship is awarded by the Senatus Academicus to a student who has, within six years of the date of the competition, completed the examinations necessary for the degree of Master of Arts in the University of Edinburgh, with or without honours, who has included in his examination the subjects of Latin and Greek, and who has attended the class of Celtic and attained distinction in that subject. The scholar must study Celtic in any University or other place offering special facilities for Celtic study, subject to the approval of the Senatus Academicus. The Scholarship is of the annual value of about £85, 17s. 4d., and is tenable for one year. At the end of his period of tenure the scholar must submit to the Senatus Academicus a report of the work he has done, and of such further studies in Celtic as he proposes to prosecute, and the Senatus Academicus may, if they think fit, appoint him to the said Scholarship for a further period of one year. The first award may be made in April 1897.

IV.—FELLOWSHIPS.

I.—GUTHRIE FELLOWSHIP IN CLASSICAL LITERATURE.

This fellowship, founded in 1866 by James Guthrie, Esq., London, is of the annual value of £83, 15s., and is tenable for four years. By

the terms of the Deed of Foundation (given at p. 210 of the CALENDAR for 1866-67) it is for proficiency in Classical Literature, and is open to Graduates in Arts of the University who have taken their Degree since the last competition. Students who have passed all their examinations for a Degree since the last competition, but have deferred graduating, are also eligible. It cannot be held along with any other Fellowship or Scholarship in a Scottish University. The next Competition may take place in April 1899.

1895. *R. L. Ross, M.A.*

II.—SIR WILLIAM HAMILTON FELLOWSHIP IN MENTAL PHILOSOPHY.

This Fellowship, founded in 1866 by the Subscribers to the fund for a Memorial to the late Professor Sir William Hamilton, and by the Association for the better endowment of the University, is of the annual value of £85, 5s., and is tenable for three years. By the Deed of Foundation (given at p. 213 of CALENDAR for 1866-67), the Fellowship is open to all Graduates in Arts of the University of Edinburgh of not more than three years' standing at the time of the competition. It cannot be held along with any other Scholarship or Fellowship in a Scottish University. The subjects of examination are Logic, Metaphysics, Moral Philosophy, and the History of Philosophy. The next Competition may take place in April 1897.

III.—SHAW FELLOWSHIP IN MENTAL PHILOSOPHY.

This Fellowship, founded in 1867 by Contributors to a Memorial to Sir James Shaw, Bart., a native of Ayrshire, afterwards Lord Mayor of, and M.P. for, London, and by the Association for the better endowment of the University, for the encouragement of the study of Logic, Psychology, Metaphysics, Moral Philosophy, and the History of Philosophy, is awarded after competitive examination on these subjects. It is open to Graduates in Arts of any of the four Scottish Universities, of not more than five years' standing at the time of the competition, is of the annual value of £140, 2s. 6d., and is tenable for five years. It cannot be held along with any other Fellowship, Scholarship, or Bursary in any Scottish University, and it is not open to the competition of any person who already holds a Fellowship in any English or Irish University, though the holder of the Shaw Fellowship will not be precluded from afterwards obtaining an English or Irish Fellowship. The holder is required during the fourth or fifth year of his tenure of the Fellowship to deliver in this University a Course of four Lectures on any of the subjects for the encouragement of the study of which the Fellowship was founded. The next Competition for the Fellowship may take place in April 1899. (Deed of Foundation, p. 237 of CALENDAR for 1868-69.)

1893. *Harry Barker, M.A.*

IV.-VI.—GEORGE HERIOT FELLOWSHIPS.

Three Fellowships for Research, each of £100, and tenable for one year, are offered annually by the Governors of the Trust, to be awarded by Competitive Examination by means of Theses in each of the following three Groups of Study, viz. :—(1) Mathematical, Physical, Experimental, and Natural Science, embracing the following subjects :—Mathematics, Natural Philosophy, Astronomy, Botany, Geology, Physiology, Human Anatomy, Anthropology, Chemistry, Zoology. (2) Language and Literature, embracing—Latin, Greek, Modern Greek, French, German, Italian, Sanskrit, Hebrew, Arabic, Syriac, Celtic, English. (3) Philosophy and History, embracing—Logic and Metaphysics, Moral Philosophy, Political Economy, Education (Theory, History, and Art of), Philosophy of Law and History, Archæology and Art (History of), Constitutional Law and History, Roman Law, Public Law. The Fellowships are open to any Bachelor of Science or of Medicine, or to any Master of Arts with Honours of the University of not more than five years' standing from the dates of their Degrees respectively, provided the Candidate has attended during his Curriculum not less than two years at this University. In case of equality between competitors in two different Subjects within the same Group, preference will be given to the Subjects in the above order, except that the Subject in each Group in whica an award may be made during 1896 will be placed at the end of the Group in 1897. Should no award be made in any Group, the Fellowship thus set free may be awarded to one of the Fellows of the preceding year, or offered to the most deserving of the unsuccessful Candidates in one of the other Groups.

Each applicant must give evidence that his time will be sufficiently at his disposal during his tenure to allow him to carry on the Research specified.

The Fellows must prosecute Research during the tenure of their Fellowships in some department of Language and Literature, Philosophy and History, or Science, to be specified by them in their applications. The stipend is payable half-yearly in advance, but before receiving any payment after the first, the Fellow shall submit to the Dean of the Faculty in which he is a Graduate, a written report of the progress of the work in which he is engaged, with a programme of his future work.

Applications for the Fellowships must be lodged with the Secretary of Senatus annually on or before 1st June, accompanied by a Thesis, and statement by the Candidate of the manner in which he proposes to fulfil the conditions of tenure if successful in gaining a Fellowship. At the same time applications should be lodged by such of the Fellows of the preceding year as may desire a continuation of their Fellowship, and can show good reason why such continuation should be granted.

Copies of the Regulations may be obtained on application to Mr

DAVID LEWIS, Treasurer, George Heriot's Trust, 20 York Place, Edinburgh. *See* Regulations in CALENDAR for 1896-97, page 714.

1895. *D. Nichol Smith, M.A.* (English).

WILLIAM DICKSON TRAVELLING FUND.

This Fund (the interest of which amounts to about £100 per annum) has been established for the purpose of assisting Graduates of any Faculty, of not more than Three Years' standing, to travel, for a shorter or longer period, for purposes of study or research. Grants from the Fund may be made to holders of Scholarships, Bursaries, &c. Applicants are required to state—"(1) The purpose for which the Applicants desire to get a Grant for travelling; (2) the total amount of expenditure thought necessary; (3) the other means they have towards meeting this expenditure; and (4) the amount of the Grant required from the Fund." The award of a grant to be based on—"(1) The importance of the work proposed to be undertaken; (2) the sufficiency of the means proposed to be applied to the work; (3) the capability of the Applicants for the work they respectively propose to undertake." "Holders of Grants in all cases to satisfy the Senatus by periodical reports that they are carrying out satisfactorily the work or investigation undertaken; and to present a final report, or to deliver a course of public University Lectures on their work when completed." Applications must be lodged with the *Secretary of Senatus* on or before 15th March annually. For Deed of Endowment, *see* p. 514 of CALENDAR, 1889-90.

1896.—Grants of £21 were made to each of the following:—J. A. Murray, B.Sc.: Bertram Prentice, B.Sc.; D. Nichol Smith, M.A.; W. White Taylor, M.A.

THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is in the patronage of the Trustees of the British Museum, is of the annual value of £144, and is open to Graduates in any of the Faculties in this University who have obtained their Degrees after examination. For further particulars *see* under Faculty of Science, page 468.

FELLOWSHIPS, SCHOLARSHIPS, UNIVERSITY PRIZES, AND BURSARIES, OPEN DURING THE ACADEMIC YEAR 1896-97.

Fellowships.[1]

Candidates for the Fellowships and Scholarships open in Spring must give their names and addresses to the Clerk of Senatus, Univer-

[1] For further information, and for information regarding other Fellowships, Scholarships, Bursaries, and Prizes, see Fellowships, &c., where full information regarding the conditions and values, &c., are given. The values of the Fellowships, Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise and fall of the rate of interest, &c.

sity, Edinburgh, *on or before* 15th March 1897.[1] The Examinations will begin in the *Examination Hall*, University, at 9 o'clock on *Monday, 29th March* 1897, unless otherwise stated, and will be continued on following days, at the same hours.

1-3. *Three George Heriot Fellowships for Research*, Nos. IV.-VI., page 355.

4. *Hamilton Fellowship in Mental Philosophy*, No. II., page 354.

Scholarships.[2][3]

5. *Macpherson Scholarship*, No. XXXVII., page 353. The subjects of Examination are: (1) Fled Bricrend and Longes Mac N-Usnig (Windisch's Irische Texte). (2) *Modern Gaelic*: Alexander Macdonald's Poems; Keating's Three Shafts of Death, Books I. and II. (Atkinson's Edition). (3) Translations into English from Old and Modern Gaelic Authors (Scottish *and* Irish) not prescribed. (4) Translation from English into Gaelic prose (Scottish *or* Irish). (5) A general knowledge of the History of Gaelic Literature, with more detailed knowledge of the Old period (from the commencement until 1000 A.D.).

6. *Mackenzie Scholarship in Classical and English Literature*, No. II., page 343.

7. *Drummond Mathematical Scholarship*, No. VIII., page 344.

8. *John Edward Baxter Philosophical Scholarship*, No. V., page 344.

9. *Pitt Club Classical Scholarship*, No. I., page 343.

10-13. *Four Vans Dunlop Scholarships.*

10. *Vans Dunlop Scholarship in Classical Learning*, No. XXIV., page 349. Examination on 6th October 1896, and following days, from 9 to 12 and 2 to 5. Names to be entered on or before 18th September.

The following are the subjects of Examination:—

Latin.

I. Plautus, *Rudens, Miles Gloriosus.* Horace, *Odes*, and *Epistles*, bk. i. Propertius, *Selections, ed. by Postgate.* Sallust, *Catiline*, and *Jugurtha.* Tacitus, *Annals*, i.-ii., and *Agricola.* Quintilian, bk. x.

II. Translation from books not prescribed.

III. Latin Prose Composition.

IV. General questions on Language, Literature, and History, chiefly in connection with books prescribed.

Greek.

I. (i.) Homer, *Odyssey*, i.-xii.—(ii.) Sophocles, *Electra, Philoctetes*—(iii.) Aristophanes, *Wasps, Frogs*—(iv.) Thucydides, v., vi.—(v.) Aristotle, *Rhetoric*, bk. iii.

[1] The Senatus reserve power to relax this Regulation in cases where they are satisfied that very special cause has been shown.

[2] See footnote 1, p. 356.

[3] Scholarships in the patronage of the University founded prior to August 1864 are open to both sexes.

II. Translation from books not prescribed.

III. Greek Prose Composition.

IV. General questions on Language, Literature, and History, chiefly directed to test a knowledge of the books prescribed.

11. *Vans Dunlop Scholarship in Commercial and Political Economy and Mercantile Law*, No. XXV., page 350. The examination will be held at the conclusion of the Graduation examination in Law in October 1896. Names to be entered *on or before* 15th October.

The works on Political Economy recommended are :—

Adam Smith's *Wealth of Nations*, Books IV. and V.

Sidgwick's *Principles of Political Economy*, Book III.

Marshall's *Principles of Economics* (3rd edit.), Vol. I.

Nicholson's *Principles of Political Economy*, Vol. I.

Nicholson's *Money and Monetary Problems* (3rd edit.).

Bastable's *Public Finance* (2nd edit.).

Cunningham's *Growth of English Industry and Commerce*, Vol. II.

Those on Mercantile Law :—

Pollock's *Contract* (6th ed.).

Smith's *Mercantile Law* (10th ed.).

Erskine's *Principles*, Book III., T. I.-V. inclusive (19th ed.)

12. *Vans Dunlop Scholarship in English Literature and Poetry*, No. XXIII., page 349. Examination on Wednesday, 31st March 1897, and following days, from 9 to 12 and 2 to 5.

The examination will include, besides the Class Lectures, (*a*) Independent Knowledge of the History of English Literature, and (*b*) of the following works :—

Chaucer's *Prologue* to the *Canterbury Tales*, *Clerkes Tale*, and *Hous of Fame*; Langland's *Piers the Plowman*, Passus i.-iv.; Malory's *Morte d'Arthur*; Dunbar's Poems; Spenser's *Shepheardes Calendar* and *Faery Queene* (Books iii. and iv.); Marlowe's *Edward II.*; Shakespeare's *Tempest*, *Love's Labour's Lost*, *Winter's Tale*, *Romeo and Juliet*, *Othello*, *Cymbeline*, and *Sonnets*; Jonson's *Every Man in his Humour*; Bacon's *Essays*; Milton's *Paradise Lost*, i.-iii., *Sonnets*, and *Areopagitica*; Cowley's *Pindarique Odes*; Dryden's *Essay of Dramatic Poesy*, the *Defence of the Essay*, *The Indian Emperor*, and *Absolom and Achitophel*; Pope's *Essay on Criticism*, *Satires*, *and Epistles*; Swift's *Tale of a Tub*; Johnson's Lives of Cowley, Dryden, Pope, and Swift; Gray's Poems; Cowper's *Task*; Burns's Poems: Scott's Poems; Wordsworth's *Excursion*, Books i. and ii., *Prefaces*, *The Lyrical Ballad*; Byron's *Childe Harold*; Shelley's *Adonais*; Keats's *Hyperion*; Tennyson's *Idylls of the King*; Browning's *Dramatis Personæ*.

13. *Vans Dunlop Scholarship in Logic and Metaphyics*, No. XXVI., page 350. The Examination will be (as far as possible) combined with the Examination for Honours in the Department of Philosophy in March 1897.

14. *The Gray Scholarship*, No. XII., page 346.

15. *Neil Arnott Scholarship for Experimental Physics*, No. XIX., page 347.
16. *The Scott Scholarship*, No. XXXVI., page 353.
16, 17, 18. *Three Ferguson Scholarships*, No. XX., page 348.

Prizes.[1]

1. The *William Dickson Travelling Fund*, page 356.
2. The *Lord Rector's Prize*, of twenty-five guineas, for the best Essay on "The influence of the Individual in History." The Prize is open to Matriculated Students, and to Graduates of not more than two years' standing. Essays to be lodged with the Secretary of Senatus on or before 1st November, each Essay distinguished by a motto, and accompanied by a sealed envelope containing the name, address, and University standing of the Candidate.
3. *Scott and Dunbar Prize*, No. VI., page 342.
4. *Bruce of Grangehill and Falkland's Prize*, No. III., page 342.
5. *The Elizabeth Hamilton Prize* of £5 is offered to the best Woman Student in the Classes of Logic and Mental Philosophy.
6. *Neil Arnott Prize*, about £42, No. I., page 692.
7. *Cousin Prize in Fine Art*, No. VII., page 343.
8, 9. *Gray Prizes* of £20 and £10 for the first and second best Essays on "The life and writings of Robert Louis Stevenson." For further information apply to the Rev. W. D. Herald, Duns.
10. *Dr Muir's Prizes*, No. V., page 342.
11, 12. *Two Newton Bursaries or Prizes*, No. LXIV., page 339.
13. *The Kelland Memorial Prize*, of about £4, 12s., will be awarded by Examination in October. The paper will be on the Higher Geometry for the John Welsh Bursaries (set on Monday, 5th October, at 9 A.M.), with such additional questions as may be deemed necessary. Students who made a complete attendance on the Junior Mathematics Class for the first time in the previous Session (1895-96) will alone be eligible to compete for the prize in October next. Names to be given in not later than 18th September.

Bursaries.[1]

FOR STUDENTS ENTERING THEIR FIRST YEAR.

(For Time-Table of Examinations, see pages 132-134.)

Bursaries in Arts heretofore tenable for four years shall continue to be so tenable, provided that, if the holders graduate after three years, they shall only retain their Bursaries during a fourth year if they shall

[1] See footnote 1, page 356.

engage in study approved by the Senatus in subjects included in the Curriculum for Degrees in Arts or in Pure Science. Bursars in Arts, subject to the provision as to the fourth year of tenure, shall attend in each year at least two classes qualifying for Graduation in Arts, and shall duly perform the work of these classes: Provided (1) that, for the purposes of this section, the classes known as Middle Classes, so long as the same exist, may be attended in place of classes qualifying for Graduation; and (2) that it shall be in the power of the Senatus, with approval of the University Court, to permit such Bursars to attend classes qualifying for Graduation in Pure Science in place of classes qualifying for Graduation in Arts.

The Bursaries are awarded on the results of the University Bursary Examinations unless otherwise stated, and are tenable at the University of Edinburgh only. The Senatus reserve the power, under Section VIII. of Ordinance No. 57, to award not more than two First Year Bursaries in Arts in respect of exceptional distinction in any one branch of study.

For Bursary and other purposes, where the phrase "First-year's Student in Arts or Pure Science" is not by Deed of Foundation or otherwise defined, it shall mean "A Student in Arts or Pure Science who has not attended any class qualifying for Graduation in the said Faculties in any Scottish University."

The Subjects of Examination for the first year Bursaries, Nos. 1 to 14 inclusively in the following list, are the subjects prescribed for the Preliminary Examination, viz.: — English (full marks 100), Latin (100), Greek (100), Mathematics (100), French (50), German (50), Italian (50), and Dynamics (50), with additional papers in English, Latin, Greek, and Mathematics. Candidates may select not more than five subjects; provided always that no Candidate will be credited with marks in any subject in which he has not obtained twenty-five per cent. of the total marks assigned to that subject. Those who select Latin, Greek, or Mathematics must for the Bursary Competition take the papers on these subjects on the Higher Standard. The Examination Papers are indicated in the Time-Table of Examinations by the figure 1.

Candidates for Bursaries [Nos. 15 to 21 inclusively, and others] which are not awarded by open competition must present themselves for the Preliminary Examination in Arts prescribed by the Regulations for Degrees in Arts, Section III., and no Bursary shall, except as hereinafter provided, be awarded to any Candidate who shall not have passed the Preliminary Examination in Arts (or its equivalent). But it is in the power of the Senatus, with the approval of the University Court, to admit to a Bursary in Arts not awarded by open competition a Candidate who shall have passed in at least one subject of the Preliminary Examination, on the condition that he shall not retain the Bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his

admission as Bursar. When there are more than one eligible Candidate for a restricted or preferential Bursary [Nos. 15 to 21], the Subjects of Examination are:—English (as for Arts and Science Preliminary), Lower Latin, Lower Greek, and Lower Mathematics. Candidates for the MacKinnon Bursary will in addition get Translation of an easy passage from Gaelic to English, Translation of Sentences from English to Gaelic, and Elementary Questions in Gaelic Grammar. The papers are indicated in the Time-Table of Examinations by the figure 3.

Candidates for Bursaries Nos. 1 to 21 inclusively may obtain schedules at the Matriculation Office, University (Old) Buildings, which must be completed and returned to the Clerk of Senatus *before* 18th September. The Senatus may relax this Regulation in cases where very special cause has been shown.

County Clubs, and others who prefer this examination, may, by arranging with the University Court, avail themselves of the University Examinations by giving written intimation of the names of their Candidates at the Matriculation Office not later than 18th September. Those who desire to have their Bursaries inserted in the CALENDAR, under the head of Bursaries open during the year, are requested to give intimation to the Editor before 1st January.

Candidates for Bursaries, unless also Candidates for the Preliminary Examination, pay no fee.

Town Council Bursaries.—Candidates for Bursaries in the gift of the Town Council, many of which are vacant, are referred to the "*City Clerk, Council Chambers,* Edinburgh," to whom early application should be made.

County Club and Private Bursaries.—Candidates for Bursaries instituted by various County Clubs are referred to the respective Secretaries of those Clubs. Information as to Private Bursaries may be obtained from the Patrons or from their Agents.

The names of the successful Candidates, and of others distinguished in the ordinary Bursary competition, will be published, in the order of merit, in the University Calendar, along with the names of the schools from which they come, provided that they have matriculated and enrolled in the necessary classes for 1896-97.

1. *Jardine* (*Bidder*) *Bursary,* of £43, 12s. a-year, tenable for four years.

2-4. *Three Patrick Bursaries,* of about £40 a-year, one tenable for four years, one for two years, and one for one year, for those who have completed their School Education at Ayrshire schools or academies.

5. *Whitelaw Bursary,* about £23, 9s. 8d., tenable for three years.

6. *Two University Endowment Association Bursaries,* each of the annual value of £20, tenable for three years. These Bursaries cannot be held with any other Bursary in any Scottish University.

7. *Tyndall Bruce Bursary,* of the annual value of £20 a-year, tenable for three years.

8, 9. *Two Sibbald Bursaries,* of the annual value of £30, tenable

for three years. Apply to Messrs Mackenzie, Innes & Logan, W.S., 23 Queen Street, Edinburgh, before 15th September.

10. *Thomson Bursary*, £25 a-year, tenable for four years. Apply to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, Edinburgh, before 15th September.

11. *M'Kenzie (Stornoway) Bursary*, of about £27 yearly, tenable for four years. Candidates of the name of M'Kenzie have a preference, provided they have passed the Preliminary Examination in at least two subjects, one of which must be Latin, Greek, or Mathematics on the Higher Standard.

12. *Mann Bursary*, of about £26, 13s. 4d. a-year, tenable for three years. Candidates must be sons of residents in the town of Nairn, *i.e.*, one or other of their parents must have resided within the municipal boundaries for at least twelve months at some period prior to the competition. Should there be no qualified Candidate of the first year for this Bursary, a notice will be posted at the College gate soon after the Bursary Competition. Other Preferential Candidates must then lodge their claims within one week after the notice appears on the Board.

13. *Cowan Bursary*, £30 a-year for two years, and £20 for third year. Confined to students of Ayr Academy. Candidates' names must appear in Distinguished or Honours List, or Bursary will not be awarded. Apply to J. G. M'Skimming, Accountant, Ayr, before 15th October.

14. *Ayrshire Club Bursary*, of £30 a-year for two years. Apply to Andrew White, Esq., W.S., 23 Castle Street, Edinburgh, before 15th October.

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15. *Jardine of Thorlieshope Bursary*, of the annual value of £37, 12s. 8d., and tenable for four years. Natives of the rural districts of Roxburghshire and Dumfriesshire to be preferred. The Bursars are required to attend the classes necessary for the Degree in Arts, and to take the Degree at the end of the course. In the event of there being no First Year Students, the Bursary will be thrown open to competition for one year only to second, third, or fourth year Students in succession.

16. *Mackinnon Bursary*, of about £18, 15s. a-year (under deduction of Examiner's fees), tenable for three years. Candidates must be natives of the Counties of Argyll, Bute, Inverness, Ross, or Sutherland, and must be examined in Gaelic.

17. *The A. Johnston Bursary*, £13, 2s. 2d., tenable for four years. Apply to the Patron, the Earl of Haddington.

18. *The R. Johnstone Bursary*, £15, 15s., tenable for four years. Apply to the Patron, Mr Johnston of Annandale.

19. *The Trotter and Penman Bursary*, £12, 14s. for four years. Apply to the Patron, Col. Trotter of Mortonhall.

20. *Border Counties' Association Bursary*, open both to women

and men who have attended any school in either of the Counties of Roxburgh, Berwick, Selkirk, or Borough of Berwick-on-Tweed for two complete sessions immediately prior to the time of the competition. The successful candidate must attend the classes necessary for a Degree in Arts. Apply to Mr T. Usher, Sheriff Court House, Edinburgh, before 15th September.

21. *Marshall Bursary*, of £37, 10s., tenable for four years—restricted, first, to relatives of the Founder; secondly, to those of the name of Marshall; and thirdly, to natives of West Lothian.

22. *Renton Bursary*, of about £18, 8s. 6d. for one year. Candidates must be attending one or more of the classes of Natural Philosophy, Mathematics, Chemistry, or Political Economy, and must show that they require pecuniary aid. It cannot be held by any one under the age of sixteen or above twenty-one, or with another Bursary of the annual value of £30 or upwards. The examination is in English and Elementary Mathematics, and will take place on Saturday, 31st October, at 10 o'clock. Names of Candidates to be entered at the Matriculation Office on or before 23rd October.

23. *Donald Fraser Bursary*, of £50, for high merit in the Class of Natural Philosophy, combined with proficiency in Laboratory Work, is awarded annually at the end of the Winter Session.

24-28. *Five George Heriot Bursaries for Boys* will be awarded to Students matriculating at the University for the first time, after having passed the Preliminary Examination for a Curriculum in Arts or Science. Each Bursary is of the annual value of £30 a-year, and may be tenable for three years. Subjects of examination:—(1) Latin; (2) Mathematics; (3) English; (4) Greek; (5) French; (6) German; (7) Italian; and (8) Dynamics. Candidates may select not more than five subjects of examination. The examination papers are indicated by the figure 1 in the Time-Table of Examinations, pages 132 and 133. Applications for Schedules for these Bursaries may be made to the *Governors of George Heriot's Trust*, at the Office of the Treasurer, 20 York Place, Edinburgh, on and after 15th August, and must be returned to him not later than 15th September. Candidates are required to state in their schedules of application the subjects in which they offer themselves for examination.

29-31. *Three Heriot High School Bursaries*, of £30 a year, may be tenable for three years. Regulations as in last paragraph.

32-39. *Eight George Heriot Bursaries for Women* will be awarded to Students matriculating at the University for the first time, after having passed the Preliminary Examination for a Curriculum in Arts or Science. Each Bursary is of the value of £30 a-year, and may be tenable for three years. The subjects and conditions of the examinations are the same as for the Bursaries for boys. Application to be made in the manner referred to in the previous paragraph. The examination papers are indicated by the figure 1 in the Time-Table.

40-41. *Two George Heriot Bursaries for Women* studying Medicine,

for attendance at any School of Medicine for Women in Edinburgh recognised by the University Court. Each Bursary is of the value of £30 a-year, and may be tenable for three years. Candidates *must pass the Preliminary Examination of the University either in Arts or Science.* They may take as many subjects in addition to those qualifying for the Preliminary Examination as they please; but should they fail to secure 25 per cent. of the marks allotted to a subject the paper will be cancelled. Application to be made in the manner referred to in the previous paragraph.

42-46. *Five George Heriot Bursaries*, of £30 each, and tenable for one year, at St George's Training College, Edinburgh. Candidates *must pass the Preliminary Examination of the University either in Arts or Science.* They may take as many subjects in addition to those qualifying for the Preliminary Examination as they please; but should they fail to secure 25 per cent. of the marks allotted to a subject the paper will be cancelled. Application for Schedules for these Bursaries may be made to the Governors of George Heriot's Trust at the Office of the Treasurer, 20 York Place, Edinburgh, on and after 15th August, and must be returned to him not later than 15th September.

47, 48. *Two Simson Bursaries* of the annual value of £25, tenable for three years, for Students who, having passed the Preliminary Examination, are entering on the first year of the course in Arts and are studying for the Ministry of the Church of Scotland. See definition of a First-year's Student, at page 360. The Examination will be held at the end of October or beginning of November. Apply to the Rev. Dr Langwill, Currie, or to the Rev. Dr Patrick, Greenside, Edinburgh.

49. *A Macdougall Bursary*, of £50 per annum, tenable for three years. Students attending the Gaelic Class preferred. It cannot be held with any Bursary or appointment yielding £50 per annum. Apply to W. C. Young, Esq., Solicitor, Perth.

50, 51, 52. *Bursaries offered by The Edinburgh Association for the University Education of Women.*

(1) *The Victoria Jubilee Bursary*, founded by His Excellency Dr Gunning, £40 for one year. (Circumstances to be taken into consideration.)

(2) *The Earl of Zetland's Bursary*, about £20 for one year.

(3) *The Houldsworth Bursary*, of about £30 for two years. (Open to Candidates intending to become Teachers.)

These Bursaries are offered to women Candidates. The Subjects of Examination are the same as for the University First-year open Bursaries, see page 360. They cannot be held along with any other Bursary or Scholarship whatsoever, and will be awarded to such Candidates as in the opinion of the Executive Committee best fulfil the conditions of the several trusts.

Apply to the Hon. Secretary of the Association, Miss Louisa Stevenson, 13 Randolph Crescent, Edinburgh.

53, 54, 55, 56. *The Buchanan Society give Four Bursaries* annually in Arts and Science, open to suitable young men of the names of Buchanan, M'Millan, M'Auslan, M'Wattie, and Risk. The Examination Papers are of equal value for full marks in both Arts and Science subjects, and the four competitors who have the highest marks get the Bursaries, provided a satisfactory standard of proficiency is attained. They may therefore be given all in Arts or all in Science. The Arts Bursaries are of the value of £30 annually, tenable for four years, under certain conditions. The Science Bursaries are of the value of £35 annually, tenable for three years, but may be extended to four years, under conditions similar to the Arts ones. For rules and further particulars apply to Geo. Y. Strang Watkins, 186 West George Street, Glasgow, *Secretary;* or to Geo. S. Buchanan, 85 Candleriggs, Glasgow, *Treasurer.*

FOR STUDENTS ENTERING THE SECOND SESSION IN ARTS.[1]

See Time-Table of Examinations.

1. *Tyndall Bruce Bursary*, £35 a-year, for three years.
2. *Stuart Bursary*, annual value £18, tenable for three years.

The subjects of examination are Latin, Greek, and Mathematics.

The following subjects are prescribed for the examinations in Latin and Greek:—*Latin*—Virgil, *Aen.*, vii. and viii.; Horace, *Epistles*, ii.; Tacitus, *Annals*, i., ii.; Latin prose composition. *Greek*—Homer, *Iliad*, xviii., xix.; Sophocles, *Œdipus Coloneus*; Demosthenes, *Olynthiacs*, i., ii., iii. Latin and Greek prose composition, and translation from books not prescribed.

3. *Patterson Bursary in Anglo-Saxon Grammar and Literature*, of £16, 2s. 4d. a year, tenable for two years, and open to all students in their second, third, or fourth year of Matriculation who present to the Faculty a certificate of attendance in the Class of English Literature in the University. The holder must produce certificate of attendance on the Class of German and the Teutonic Languages in the first session after his appointment. The Examination will be on—

(1.) *Literature.*—The Class Lectures; Ten Brink's *Early English Literature*, Vol. I., Bk. i., transl. by Kennedy; Stopford Brooke's *History of Early English Literature* (i. and ii.).

(2.) *Language.*—Old English Grammar, as treated in Sievers's *Old English Grammar*, ed. Cook; the "Grammatical Introduction" to Sweet's *Old English Reader* (Clar. Press); MacLean's *Old English Reader;* Morris and Kellner's *Historical Outlines of English Accidence;* and Kellner's *Historical Outlines of English Syntax.*

(3.) *Prescribed Readings.—The Chronicle*, A.D. 890-1001, in the

[1] See footnotes 1, pages 356 and 357.

Parker Text (ed. Plummer); selections from Ælfred's "Orosius," Ælfred's "Beda," and Ælfric's "Life of King Oswald," printed in Sweet's *Old English Reader; The Wanderer* (Grein, ed. Wülcker, I., p. 284; Sweet's *Reader*, p. 177); *The Beowulf*, l. 1251-l. 1887, Siȝon þa to sкeþe., . . . se þe oft maneȝum scod (Grein, ed. Wülcker I., pp. 159-219).

(4.) An unseen passage for translation into modern English.

Names of Candidates to be announced at the *Matriculation Office, University, Edinburgh*, not later than the 18th September 1896.

4 and 5. *Two Spence Bursaries*, each of the annual value of £30 for first year and £40 for second year of tenure, open to Students who have studied in the University of Edinburgh, at the beginning of their second session in a three years' curriculum, and of their third session in a curriculum of four years. The Examination is in Latin, Greek and Mathematics, and will be held at St Andrews in the end of September or beginning of October. Apply to Mr Henry A. Pattullo, Solicitor, 1 Bank Street, Dundee, Factor to the Trust.

FOR STUDENTS ENTERING THE THIRD SESSION IN ARTS.[1]

See Time-Table of Examinations.

1. *Horsliehill Scott Bursary*, of £33, 6s. 4d. a-year, for two years (under deduction of Examiners' fees).

2. *Harrison Bursary*, £33, 5s., for two years (under deduction of Examiners' fees).

The subjects of examination for *Third* Session Bursaries are Classics, Mathematics, and Logic with Psychology.

The following subjects are prescribed for the examination in Classics:—*Latin*—Virgil, *Aen.*, vii. and viii.; Tacitus, ii., iii. *Greek*—Sophocles, *Œdipus Coloneus*: Demosthenes, *Olynthiacs*, i., ii., iii. Latin and Greek prose composition, and translation from books not prescribed.

No special books prescribed for Mathematics, or for Logic with Psychology. Candidates should revise the lectures and text-books in these classes.

3. *Patterson Bursary.* See page 365.

Names of Candidates to be announced at the *Matriculation Office, University, Edinburgh*, not later than the 18th September 1896.

"Bursars in the Faculty of Arts must annually attend at least two of the Classes necessary for the Degree of Master of Arts, and must present themselves at the Examinations necessary for that Degree.

"Each Bursar must present a Certificate, signed by the Dean, attest-

[1] See footnotes 1, pages 356 and 357.

ing his regular attendance on the proper Classes in the Faculty of Arts, on each occasion on which he applies to the Factor for a payment."

Certificates, in terms of this regulation, will be given to Bursars, by the *Dean of the Faculty of Arts*, after 13th November; also at the end of the Session. In applying to the Dean for the Certificate in November, Bursars must present their Class Cards for the Session; and at the end of the Session they must present certificates from the Professors that they have attended with regularity and made progress in their studies. Payments are made by the University Factor, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 14th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars, Scholars, and Fellows who desire to resign should at once announce this to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

G. CHRYSTAL, LL.D.,
Dean of the Faculty of Arts, and
Professor of Mathematics.

Faculty of Science.

Dean—PROFESSOR GEIKIE, D.C.L., LL.D.

Students who do not intend to graduate may attend any of the Classes on payment of the Matriculation and the Class Fees, without having passed any Preliminary Examination. Attendance on any Class with a view to Graduation in Pure Science will not qualify unless the whole Preliminary Examination has been previously passed. Those who intend to graduate in Engineering or in Agriculture must pass the Preliminary Examination before they present themselves for any part of the First Science Examination, but not necessarily before entering on the Curriculum. The Classes in the Faculty, except a few in which arrangements have not yet been made, are now open to women.

Programme of Classes.

WINTER SESSION, 1896-97.

The Classes meet daily (Saturdays excepted), unless otherwise stated:—

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
Junior Mathematics...	13 Oct., 12 o'cl.	Prof. Chrystal	£3 3
Senior Mathematics...	13 Oct., 9 ,,		3 3
Mathematics (Intermediate Honours)	14 Oct., 11 ,,		3 3
Do. (Advanced Honours).....	14 Oct., 10 ,,		3 3
Zoology (Elementary)	13 Oct., 12 ,,	Prof. Ewart	4 4
Practical Zoology (Elementary).	13 Oct., 11 ,,		2 2[2]
Advanced Zoological Laboratory ...	... ...		...
Morphology of Vertebrates (with Laboratory work)	14 Oct., 2 ,,	J. Beard, D.Sc...	3 3[2]
Comparative Embryology.....	12 Jan., 2 ,,		3 3[3]
Botany (Advanced) ...	13 Oct., 11 ,,	Prof. B. Balfour	3 3[4]
Prac. Bot. (Advanced)	13 Oct., 11 ,,		2 2[4]

[1] Fees for second and subsequent attendances, see page 372.
[2] Besides charge of 10s. for Laboratory Expenses.
[3] Five Shillings University Entrance Fee for non-matriculated Students.
[4] Besides Garden Fee of Five Shillings.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1] £	s.
Plant Physiology	11 Jan., 10 o'cl.	W. G. Smith, B.Sc., Ph.D...	2	2[2]
Natural Philosophy...	13 Oct., 11 ,,	Prof. Tait.....	3	3
Do. (Advanced Honours).	21 Oct., 12 ,,		3	3
Physical Laboratory .	19 Oct., 10 ,,		2	2
Natural Philosophy (Intermediate Honours Course) (*Mon., Wed., Fri.*)	14 Oct., 9 ,,	Cargill G. Knott, D.Sc.....	3	3
Dynamics (Advanced Science Course) (*Mon., Wed., Fri.*)	14 Oct., 10 ,,		3	3
Chemistry	13 Oct., 10 ,,	Prof. Crum Brown	4	4
Practical Chemistry...	1 Dec., 11, 2,,		3	3
Chemistry (Advanced Course)..	5 Jan., 4 ,, (*Tu. Wed. & Th.*)		2	2
Astronomy (*Mon., Tues. Wed. Thurs.*)	13 Oct., 11 ,,	Prof. Copeland..	3	3
Anatomy	13 Oct., 1 ,,	Prof. Sir William Turner.....	4	4
Practical Anatomy....	1 Oct., *daily.*		3	3
Anatomical Demonstrations (Regional Anatomy)	13 Oct., 4 o'cl.	David Hepburn, M.D.....	2	2[3]
Physiology.....	13 Oct., 10 ,,	Prof. Rutherford	4	4
Practical Physiology..	14 Oct., 1 ,,		3	3
Do. do. (Advanced)	14 Oct., 11 ,,	E. W. Carlier, M.D.	4	4
Geology & Mineralogy	13 Oct., 4 ,,	Prof. Geikie....	4	4[4]
Prac. Class (*Mon., Wed., & Fri.*) ...	14 Oct., 2-4 ,,		3	3
Engineering	3 Nov., 9 ,,	Prof. Armstrong	4	4
Sanitary Engineering and Building Construction	10 Nov., 10 ,,		2	2
Engineering (short additional Course: Applied Mechanics).	14 Oct., 9 ,,	W. H. Kerr, M.A., B.Sc..	1	1[5]

[1] Fees for second and subsequent attendances, see page 372.
[2] Besides Garden Fee of Five Shillings.
[3] When taken along with Practical Anatomy, £1, 1s.
[4] First part of this Course up to Christmas qualifies as a Half-Course for Graduation in Arts. Fee, £2, 2s.
[5] No Fee for Students of class of Systematic Engineering.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
			£ s.
Geometrical & Mechanical Drawing	2 Nov. 10 to 2 o'cl	W. H. Kerr, M.A., B.Sc ...	2 2
Drawing in its relation to Public Health.....	... ...		2 2
Agriculture and Rural Economy..	13 Oct., 9 ,,	Prof. Wallace ..	4 4
Economics as applied to Agriculture (*The Political Economy Class in Arts till Christmas*)	13 Oct. 5 ,,	Prof. Nicholson	2 2
Agricultural Chemistry.....	13 Oct., 3 ,,	A. P. Aitken, D.Sc.....	3 3
Forestry	13 Oct., 10 ,,	Col. Bailey, R.E.	3 3[2]
Agricultural Entomology (Twenty Lectures).....	5 Jan., 2 ,,	W. Fream, LL.D., B.Sc. (Lond.)	2 2[2,3]

SUMMER SESSION, 1897.

The Classes meet daily (Saturdays excepted), unless otherwise stated.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
			£ s.
Senior Mathematics (First Graduation Half-Course)	4 May, 11 o'cl.	Chas. Tweedie, M.A., B.Sc.	2 2
Senior Mathematics (Second Graduation Half-Course)	4 May, 12 ,,		2 2
Honours Mathematics (Half-Graduation Course).....	4 May, 10 ,,		2 2
Physics (*mainly for Students of Medicine*)	4 May, 12 ,,	Prof. Tait..... ...	3 3
Physical Laboratory ...	4 May, 10 ,,	Prof. Tait and Assistant.....	2 2
Elementary Dynamics	4 May, 9 ,,	C. G. Knott, D.Sc.	2 2

[1] Fees for second and subsequent attendances, see page 372.
[2] Five Shillings University Entrance Fee for Non-Matriculated Students, unless taken with a view to Graduation in Agriculture.
[3] Free to all present and past Students of the Agriculture Class.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1]
Advanced Experimental Physics	4 May, 10 o'cl.	W. Peddie, D.Sc.	£2 2
Chemistry (Organic).	4 May, 1 ,,	Prof. Crum Brown	2 2
Do. (Practical)	4 May, 2 ,,	Brown	3 3
Chemical Theory (*Mon. & Fri.*)	7 May, 10 ,,	Leonard Dobbin, Ph.D.	1 1
Mineralogy and Crystallography	4 May, 9 ,,	Hugh Marshall, D.Sc.	2 2
Astronomy (Advanced) (*Tues. & Fri.*)	4 May, ,,	Prof. Copeland	2 2
Practical Anatomy	4 May, *daily.*	Prof. Sir W. Turner and Demonstrators	2 2
Anthropology[2] (*Tues., Wed., & Fri.*)	4 May, 2 o'cl.		2 2[2]
Anatomical Demonstrations (Regional Anatomy)	4 May, 11 *daily.*	David Hepburn, M.D.	...
Practical Physiology	4 May, 10 o'cl.	Prof. Rutherford	3 3
Do. (Advanced Class)	*In Winter only.*		3 3
Geology (*Mon., Wed., Fri.*)	5 May, 4 o'cl.	Prof. Geikie,	3 3[3]
Field Demonstrations on *Saturdays.*	... ...		
Petrology	5 May, 10-12 ,,	J. S. Flett, M.A., B.Sc., M.B., C.M.	2 2
Zoology (Elementary).	4 May, 12 ,,	John Beard, D.Sc.	4 4
Do. (Elementary Practical)	4 May,		2 2[4]
Invertebrate Zoology	4 May,[4] ,,		2 2
Do. (with Lab. Work)			3 3[4]
Advanced Zoology (Embracing a Course on Comparative Morphology of the Invertebrata and an Advanced Laboratory Course)	4 May,[5]	Prof. Ewart	3 3[4]
Natural History Laboratory	4 May, 2 ,,		6 6

[1] Fee for second or subsequent attendances, see page 372.
[2] When taken with Practical Anatomy, £1, 1s.
[3] This Course qualifies as a Half-Course for Graduation in Arts.
[4] Besides charge of 10s. for Laboratory Expenses.
[5] At hours to be arranged.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.[1] £ s.
Botany	4 May, 8 ,,	Prof. Bayley Balfour	4 4[2]
Practical Botany	4 May, 9 ,,		2 2[2]
Field Demonstrations on *Saturdays*	... ...		...
Plant Physiology	5 May, 2 ,,	W. G. Smith, B.Sc., Ph.D.	2 2
Engineering Field-Work (Surveying, Levelling, &c.)[3]	16 June, 9.30 A.M.	Prof. Armstrong	3 3

FEES FOR SECOND OR SUBSEQUENT ATTENDANCES.

1. *Lecture Courses*, which qualify alike for Graduation in Science and Medicine: Second attendances on £4, 4s. Courses, £3, 3s.; on £3, 3s. Courses, £2, 2s.; subsequent attendances free: second attendances on £2, 2s. Courses, no reduction; third or subsequent attendances, £1, 1s. Perpetual Tickets for initial payment, £6, 6s. No reduction for re-attendances on Practical Classes or Laboratories.

2. *Lecture Courses* which qualify both for Arts and Science: Second attendances on £4, 4s. Courses, £3, 3s.; third or subsequent attendances, £1, 1s.; second attendances on £3, 3s. Courses, £2, 2s.; third or subsequent attendances, £1, 1s.; second attendances on £2, 2s. Lecture Courses (not being Honours Half-Courses for M.A.), £1, 11s. 6d.; third or subsequent attendances, £1, 1s.; Lecture Courses, when fee for first attendance is less than £2, 2s., no reduction. Full Courses (being also Honours Courses for M.A.), second attendances, no reduction; third or subsequent attendances, £2, 2s.; second attendances on £2, 2s. Courses (being also Half Honours Courses for M.A.), no reduction; third or subsequent attendances, £1, 1s.

3. *Lecture Courses* not included in the curricula in Arts or Medicine: Second attendances on £3, 3s. Courses, no reduction; third or subsequent attendances, £2, 2s.; on £2, 2s. Courses, second attendances, no reduction; third or subsequent attendances, £1, 1s. On Agriculture and Rural Economy, second attendance, £3, 3s. Perpetual Ticket by initial payment, £6, 6s.

4. *Courses in Engineering and Drawing.* No reduction for second or subsequent attendances.

5. *Practical Classes and Laboratory Courses.* No reduction for re-attendances.

MATRICULATION FEES. See page 27.

[1] Fee for second or subsequent attendances, see below.
[2] Besides Garden Fee of 5s.
[3] Given in alternate Summers.

CLASS SESSIONS.

There are Two Sessions in each year, viz. :—

I. The Winter Session, which opens on 13th of October 1896, and closes on 26th March 1897. Practical Anatomy, and Public Health Laboratory work begin on the 5th of October 1896 and 4th May 1897.

The Classes meet for the last time before the Christmas Vacation on Friday, 18th December 1896, and re-assemble on Tuesday, 5th January 1897.

II. The Summer Session, which opens on the 4th May, and closes on the 16th of July 1897.

The Graduation Ceremonials take place on 10th April and 2nd August 1897.

The following means are afforded for Practical Instruction:—

I. LABORATORIES.

Physical Laboratory, affording Students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries, daily from 10 to 3, under Professor Tait.

Geological and Petrological Laboratory, for practical instruction in the study of Minerals, Rocks, and Fossils, and the methods of plotting and drawing geological maps and sections, on Monday, Wednesday, and Friday from 2 to 4, under Professor Geikie.

Engineering Drawing Class Room, daily during the Winter Session, from 10 to 2, for instruction in drawing and drawing-office routine.

The Engineering (Fulton) Laboratory, open on fixed days during the Winter Session, for practical instruction in the processes employed by the Engineer in the Experimental Determination of the Physical and Economical Constants of Materials, Machines, and Prime Movers, and in the Practical Applications of Electricity.[1]

Practical Instruction in Office and Field-work, daily (in alternate years), in connection with the Summer Course on Surveying, Levelling, &c., from 11 to 4.

Agriculture Department in the Museum of Science and Art, open daily to Students attending the Agriculture Class. Excursions to farms are made on Saturdays. The leading agricultural newspapers are left for the use of Students in the Agriculture Lecture Room.

Royal Observatory, open to Students of Astronomy on Friday evening, from 8 P.M.

Royal Botanical Garden Laboratory at the Royal Botanic Garden, open daily for the practical study of plants and for research, under the Professor, assisted by James Adam Terras, B.Sc., and J. H. Burrage, B.A.

Physiological Laboratory, for Physiological Research, and the

[1] Fees—Winter Session, £10, 10s.; Summer Session, £6, 6s.

study of Practical Physiology, open daily, under the Professor, assisted by E. W. Carlier, M.D., C.M., B.Sc., and R. Hutchison, M.D., C.M.

CHEMICAL LABORATORIES (distinct from the Practical Chemistry Room), for forty Students, fitted with all necessary apparatus for chemical analysis and research, open daily, under the Professor, assisted by Leonard Dobbin, Ph.D.; Hugh Marshall, D.Sc.[1]

DISSECTING ROOMS, open daily under Professor Sir William Turner, assisted by David Hepburn, M.D.; James Musgrove, M.D.; J. B. Yeoman, M.B., C.M.; and other assistants. Opens 1st October 1896 and 4th May 1897.

NATURAL HISTORY LABORATORIES, for research and for study of the structure and development of Invertebrate and Vertebrate forms, open daily, under the Professor, assisted by J. Beard, D.Sc.[2]

PUBLIC HEALTH LABORATORY, for Hygienic investigation, comprising a Chemical, a Bacteriological, and a Meteorological Department, open daily, under the Professor, assisted by Charles Hunter Stewart, M.B., C.M., D.Sc., and James Buchanan Young, M.B., C.M., D.Sc. Opens 1st October 1896 and 4th May 1897.[2]

II. MUSEUMS. See page 51.

Courses of Lectures.

1896-1897.

I.—PURE SCIENCE.

1. MATHEMATICS.

PROFESSOR CHRYSTAL.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

For Synopses of Lectures, see under Faculty of Arts.

II. ZOOLOGY, including COMPARATIVE ANATOMY.

PROFESSOR EWART.

For Synopses of Lectures on Zoology and of Courses on Practical Zoology, see under Faculty of Medicine.

COMPARATIVE EMBRYOLOGY.

J. BEARD, D.Sc., *Lecturer.*

The Course consists of Lectures and Practical Work.

Lectures.—The following subjects will be dealt with: Con-

[1] Fees for Chemical Laboratory.—*Whole-day*—Winter Session, £10, 10s., Oct.-Dec., Jan.-March; or Summer Session, £5, 5s. *Half-day*—Winter Session, £6, 6s., Oct.-Dec., Jan.-March; or Summer Session, £3, 3s. Preference will be given to students in the above order. Students who are not Matriculated may attend the Chemical Laboratory on payment of the entrance fee of 5s. in addition to the Laboratory fees.

[2] Fees—Winter Session, £10, 10s.; Summer Session, £6, 6s.

jugation and sexual reproduction, the maturation, &c., of the egg and spermatozoan, the modes of formation of the germinal layers in a series of selected types, the development of Scyllium or Raja, Amphioxus and Rana as a basis for general Vertebrate Embryology, the organogeny of the chief systems of organs in the Vertebrata, the evolution and comparative development of the placenta. A few lectures will be given on the general principles and theory of Comparative Embryology, the recapitulation theory, and the nature of larval forms.

Practical Work.—Each member of the Class will have an opportunity of preparing for himself and studying a series of preparations to illustrate the development of Salmo, Rana, Gallus, and other forms. In addition, an extensive series of preparations of Raja, Scyllium, Torpedo, and Lacerta, &c., and of certain Invertebrate forms will be available.

In the Laboratory Work members of the Class may confine their studies to one particular type, or to some selected branch, such as Mammalian Embryology.

Books for reference.—Marshall's "Vertebrate Embryology"; Hertwig's "Embryology of Man and the Higher Vertebrates"; Korschelt und Heider's "Vergleichende Embryologie der Wirbellosenthieren"; Willey's "Amphioxus"; and for recent advances, "Ergebnisse der Anatomie u. Entwickelungs Geschichte."

MORPHOLOGY OF THE VERTEBRATA.

A Course of twenty-five Lectures on the Morphology of the Vertebrata; the nervous system and its sense organs and the genito-urinary system receiving particular attention.

As far as time permits the question as to the morphological nature of the vertebrate head and skeleton will be discussed.

III. BOTANY.

PROFESSOR BAYLEY BALFOUR.

For Synopsis of Lectures, see under Faculty of Medicine.

PLANT PHYSIOLOGY (ADVANCED)

W. G. SMITH, B.Sc., PH.D., *Lecturer.*

This Course will be given at the Royal Botanic Garden both in the Winter and the Summer Sessions. It will consist of

Lectures and Practical Demonstrations, supplementary to the Lectures of the Professor. The Processes in Plant Nutrition, Assimilation, and Respiration, the Irritability and Movements of Plant Organs, and the Physiology of the Reproductive Process in Plants will be treated, in a series of Demonstrations, in which the Students will be expected to take part.

IV. NATURAL PHILOSOPHY.

PROFESSOR TAIT.

C. G. KNOTT, D.Sc., *Lecturer on Applied Mathematics.*

ELEMENTARY DYNAMICS.

Summer Half-Course, see under Faculty of Arts.

ADVANCED EXPERIMENTAL PHYSICS.

WILLIAM PEDDIE, D.Sc., *Lecturer.*

For Synopses, see Natural Philosophy, &c., under Faculty of Arts.

V. CHEMISTRY.

PROFESSOR CRUM BROWN.

For Synopses of Courses, see under Faculty of Medicine.

ORGANIC CHEMISTRY.

This Class meets daily during the Summer Session at 1 P.M.

ADVANCED CHEMISTRY.

Course of twenty-five Lectures to begin after Christmas. Subject for 1896-97, "Relation of Physical Properties to Chemical Composition and Constitution."

CHEMICAL THEORY.

LEONARD DOBBIN, PH.D., *Lecturer.*

The subjects will vary from year to year. They will include historical matters, and discussions of the more important chemical theories which are at present productive or which have been superseded. The Class will meet on Mondays and Fridays at 10 A.M., during the Summer Session. The Subject proposed for 1897 is, "History of the Progress of Organic Chemistry." —Fee, £1, 1s.

MINERALOGY AND CRYSTALLOGRAPHY (ADVANCED).

HUGH MARSHALL, D.Sc., *Lecturer.*

Daily, at 9 A.M., beginning Tuesday, 5th May. Fee, £2, 2s.

The earlier part of the Course will be on Physical Crystallography generally, including the optical and other properties of crystalline substances and the geometrical properties of crystals. The latter section will deal specially with minerals, with those parts of Systematic Mineralogy not included in the earlier section, and with the Descriptive Mineralogy of minerals of most importance from a Geological or a Chemical point of view. Some of the meetings will be devoted to Elementary Practical Work and Demonstrations.

VI. ASTRONOMY.

PROFESSOR COPELAND.

For Synopsis, see under Faculty of Arts.

An Advanced Practical Course, consisting of 30 meetings of two hours each, may be held in Summer.

PRACTICAL ASTRONOMY (ADVANCED SUMMER CLASS).

This Class will only be held if a sufficient number of Students present themselves. It will meet at the Royal Observatory, Blackford Hill, on Tuesdays and Fridays in the Summer Session. Evening hours will also be arranged to suit the progress of the work.

VII. HUMAN ANATOMY, including ANTHROPOLOGY.

PROFESSOR SIR WILLIAM TURNER.

For full Synopsis of Lectures on Anatomy and for Course of Practical Anatomy, see under Faculty of Medicine.

ANTHROPOLOGY.

If a sufficient number of Students express their intention of selecting Human Anatomy, including Anthropology, as a subject for the Degree of B.Sc., the Professor of Anatomy will deliver, during the Summer Session, a course of twenty-five Lectures on Physical Anthropology. Fee, £2, 2s.; or for Students who take the Summer Course of Practical Anatomy, £1, 1s.

VIII. PHYSIOLOGY.

PROFESSOR RUTHERFORD.

For Synopsis of Lectures, see under Faculty of Medicine.

ADVANCED PRACTICAL PHYSIOLOGY.

E. W. CARLIER, M.D., B.SC., *Lecturer.*

This course is devoted to Experimental and Chemical Physiology and Histology of a more advanced nature than that of the ordinary course of Practical Physiology.

1. The Experimental part embraces the Experimental Physiology of muscle and nerve; the heart and circulation; respiration; central nervous system; organs of sense and voice.

2. The Chemical part embraces the physiological chemistry of the blood, including the spectroscopic study of haemoglobin and its derivatives; bile; digestive fluids and their actions; milk; muscle.

3. The Histological part embraces the advanced study of the structure of various tissues and organs as revealed by recent methods of research of a refined character.

This course is adapted for those preparing for examinations in Natural Science and Honours Examinations in Physiology, and for those who may afterwards desire to prosecute Physiological Research.

The Class meets for two hours twice a week in the Winter Session, beginning in October and extending to March.

IX. GEOLOGY, including MINERALOGY.

PROFESSOR GEIKIE.

Winter Course.

I. CLASS OF GEOLOGY AND MINERALOGY.—Daily, at 4 o'clock. The Course embraces :—

1. *The History of Geology*—An outline of the growth of the science from the time of the early cosmogonies downwards.

2. *Dynamical Geology*—A discussion of the nature and causes of geological changes effected on the surface and within the interior of the earth.

3. *Mineralogy*—An account of the physical and chemical

characters of minerals, and a description of some of the more important and typical species in the various mineral groups.

4. *Petrology*—A description of the various families of rocks.

5. *Structural Geology*—A description of the geological structure and relations of rock-masses to each other.

6. *Palæontological Geology*—An account of the nature and use of fossils in geological inquiry.

7. *Palæontology*—A description of the more important types of life represented by fossils.

8. *Historical Geology*—The history of the successive geological periods.

9. *Physiographical Geology*—An inquiry into the origin of the present outlines of the earth's surface.

Text-Books—"Outlines of Geology," by the Professor (*Stanford*); Hatch's "Mineralogy" (*Whittaker*); Hatch's "Petrology" (*Sonnenschein*). More detailed works of reference, most of which are in the College Reading-Room, are recommended for each branch of the lectures.

II. Class of Practical Mineralogy and Geology.—Two hours (2 to 4), on Mondays, Wednesdays and Fridays, under superintendence of the Professor. This Course, up to Christmas, is a half-Course qualifying for Graduation in Arts.

III. Field Demonstrations.—Short excursions are made on Saturdays to places of geological interest near Edinburgh, when the Class Lectures are illustrated by demonstrations in the field, and practical instruction is given in Geological Surveying. At the close of the Session (usually in the last week of April) an excursion, of about a week, may be made for the purpose of examining the structure of a more distant district.

These Field Demonstrations are open to Students attending either the Class Lectures or the Practical Class.

Adjoining the Class-room is a small Museum exhibiting the characters of minerals and rocks, and the typical fossils of the different geological systems.

Summer Course.

The following subjects are dealt with in this Course :—

1. *Petrology.*—(The lectures are illustrated by demonstrations in the Laboratory and the Class Museum.)

2. *Palæontological Geology.* (Class Museum, see above).

3. *Structural Geology.*—Under this head *Dynamical Geology* is also discussed in more or less detail.

4. *Geological Surveying.*

5. *Economic Geology: application of Geology to Mining, Engineering, Agriculture, Public Health, &c.*

6. *Physiographical Geology.*

Structural and *Field Geology* form the principal portion of this Course, but no previous knowledge of Geology is required of the student—the elementary principles of the science being set forth both in the lecture-room and the field. The Class meets on Mondays, Wednesdays, and Fridays at 4, and a series of practical lessons on the study of rocks will be given at the beginning of the Session on Tuesdays and Thursdays at the same hour. The Saturdays are devoted to field demonstrations, when the mode of geological mapping and section drawing is explained and illustrated. This Course is a Half-Course qualifying for Graduation in Arts.

PETROLOGY.

J. S. FLETT, M.A., B.Sc., M.B., C.M., *Lecturer.*

Lectures and Practical Work, on Mondays, Wednesdays, and Fridays, from 10 to 12, in Summer.

II.—APPLIED SCIENCE.

I.—ENGINEERING.

I. MATHEMATICS.

PROFESSOR CHRYSTAL.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

For Synopses of Lectures, see under Faculty of Arts.

II. NATURAL PHILOSOPHY.

PROFESSOR TAIT.

For Synopsis of Lectures, see under Faculty of Arts.

III. CHEMISTRY.

PROFESSOR CRUM BROWN.

For Synopsis of Courses, see under Faculty of Medicine.

IV. DRAWING AND MENSURATION.

W. H. KERR, M.A., B.Sc., *Lecturer.*

CLASS OF DRAWING (GEOMETRICAL, ENGINEERING, AND ARCHITECTURAL), AND OF MENSURATION.—Students may attend at any time between 10 A.M. and 2 P.M. each day.

All Students are recommended to take the Classes in Engineering and Drawing together.

The Class in Drawing may also be attended with advantage by those who propose subsequently to attend the Class in Engineering, as Students should be able to readily understand mechanical diagrams, and to apply the graphic methods of calculation frequently employed by Engineers. The Class will be found useful also to those who propose to become architects or surveyors.

A course of instruction has been specially arranged to meet the requirements for the Degree of B.Sc. in Public Health.

SYNOPSES.

1. *Ordinary Class.*

The work is arranged so as to form a two-years' Course, and will consist of Lectures and Practical Instruction in Drawing. The Courses are described as "Junior" and "Senior"; and, though not imperative, it is desirable that they should be taken in their natural order.

Junior Course:—Plane Geometrical Drawing—Construction of Curves—Design of Toothed Wheels and Gearing—Graphic Methods of determining Stress in Structures—*Loci* of Points in Link-work—Diagrams of Velocity, Acceleration, and Energy.

Senior Course:—Solid Geometry—Interpenetration and Development of Surfaces and Solids—Isometric Projection—Perspective—Structural and Machine Drawing—Rough Sketching of Machines, &c., and the Preparation therefrom of Working Drawings—Design of Structures in Masonry, Timber, Steel, and Iron. Roofs, Bridges, Skew Arches, &c.—General Machine Design.

2. *Special Class for Public Health Students.*

The Course will include the following subjects:—Scales and

their Uses—Estimation of Areas and Volumes—Elements of Plane and Solid Geometry, and their application to the making of Structural Drawings from Models and Figured Sketches.

V. ENGINEERING.

PROFESSOR ARMSTRONG.

Winter Session.

I. Class of Engineering.—The object of the Course will be to show the practical application of Science to some branches of Engineering. The Lectures, combined with Laboratory instruction, will form a Two Years' Course, so arranged that Students can enter the Class at the beginning of either year. The following are the subdivisions of the complete Course, a part only of each subdivision being dealt with each year :—

1. Applied Mechanics; 2. One Branch of Civil Engineering; 3. One Branch of Mechanical Engineering; 4. Examples of the Application of Machinery to Manufacturing Purposes; 5. Laboratory instruction in connection with one of the foregoing.

Synopsis of the Course for the present Session :—

A.

1. Equilibrium and stability of frames, ribs, and linear arches.
2. Application of mechanical principles to combined structures, especially to roofs and bridges.
3. Nature, fitness, and strength of structural materials; stretching, crushing, bending, and twisting.
4. Earthwork and masonry; retaining walls and masonry arches.
5. Locomotive Engines.
6. Machine design.

B.

7. Testing machines and apparatus, and the testing of structural materials, with Laboratory Demonstrations, under the superintendence of the Professor.

Four Examinations are held during the Session; and each week, unless there be an Examination, a problem paper is set to be worked at home. The questions proposed are such as

are met with in the practice of Engineering ; and the answers, being returned to the Students annotated and corrected, form a body of Examples for subsequent reference.

There is also a Tutorial Class held weekly, at which the questions set in the problem paper of the previous week are discussed and explained.

Engineering Works and Factories are, from time to time, visited by the Class, under the direction of the Professor.

The attention of Students proposing to follow the foregoing course is specially directed to the following Class (II.), one attendance at which, though optional, is strongly recommended.

II. ADDITIONAL CLASS. — A short preliminary course in General Mechanics is given, *without additional fee*, for the benefit of those entering the Class of Systematic Engineering with an imperfect knowledge of Mechanical principles. This Class, taught by an assistant, will meet five days a week for about a month, commencing on the same day as the General Science Classes open.

III. A COURSE OF INSTRUCTION (Theoretical and Practical) IN SANITARY ENGINEERING AND BUILDING CONSTRUCTION, designed for Candidates for Degrees in Public Health, consisting of about fifty Lectures.

IV. THE FULTON ENGINEERING LABORATORY.—Students here receive practical instruction in the processes employed by the Engineer in the experimental determination of the physical and economical constants of materials, machines, and prime movers, and in the practical application of electricity.

Summer Session.

V. ENGINEERING FIELD-WORK.—A course of Practical Instruction in Surveying, Levelling, Setting Out, and Calculation of Quantities, is given in alternate years.

The course consists of lectures, and of practical work, as undertaken in the field and in the office, and occupies the whole of each day for about three weeks. The hours of instruction thus correspond to an ordinary Course extending over a much longer period. The Class will be next held in 1897.

Course of Study.

The following course is recommended for Students preparing for the Degree of B.Sc. in Engineering :—

1st Year. — Mathematics [Intermediate Honours Class (Winter), or Advanced Class (Summer)], Geometrical Drawing and Graphics, Chemistry (or Natural Philosophy), Engineering Field-Work (Summer Session).

2nd Year. — Engineering and Natural Philosophy (or Chemistry), Laboratory (Chemical or Physical), Engineering, Engineering and Mechanical Drawing.

3rd Year.—Natural Philosophy (Advanced Class), Engineering, Optional Course.

In some cases a modification of the above may be desirable.

The Engineering Field-Work Class may be taken during whichever of the Summers it is held.

VI. DYNAMICS.

C. G. KNOTT, D.Sc., *Lecturer.*

As a preparation for the Course described below, Students of Engineering are advised to take the Summer Half-Course on *Elementary Dynamics*, either before or after passing the First B.Sc. Examination in Natural Philosophy. For Synopsis, see Courses in Faculty of Arts.

The Advanced Science Course on Dynamics, of fifty Lectures, by the Lecturer on Applied Mathematics, is adapted for Engineering Students. In the treatment of the subject practical applications and, in particular, graphical methods of solution will receive attention ; while the simpler processes only of the differential and integral calculus will be used. The Course will include the Kinematics, Kinetics, and Statics, of particles, rigid solids, flexible cords, and perfect fluids ; and the more elementary parts of Strains and Elasticity.

Books recommended.—The simpler sections of "*Mechanics*" in the latest *Encyc. Brit.* ; Rankine's *Applied Mechanics.*

VII. GEOLOGY AND MINERALOGY.

PROFESSOR JAMES GEIKIE.

For Synopsis of Lectures, see Summer Course under Pure Science.

II.—PUBLIC HEALTH.

I. LABORATORY WORK.

PROFESSOR SIR DOUGLAS MACLAGAN.

See Schedule, page 414.

II. CLINICAL INSTRUCTION regarding Fevers and Infectious Diseases during three months in a recognised Hospital.

III. INSTRUCTION IN MENSURATION AND DRAWING.—Three months under a recognised Teacher.

Special Course by Professor Armstrong in Sanitary Engineering and Drawing, see under Engineering.

IV. PHYSICS.

PROFESSOR TAIT.

CARGILL G. KNOTT, D.Sc., *Lecturer.*

For Synopses, see under Faculties of Arts and Medicine.

V. GEOLOGY.

PROFESSOR GEIKIE.

For Synopses of Courses, see under Pure Science.

VI. PUBLIC HEALTH.

(*a*) PRACTICAL SANITATION, SANITATION, AND HYGIENE.

PROFESSOR SIR DOUGLAS MACLAGAN.

For Synopsis of Courses, see under Faculty of Medicine.

(*b*) SANITARY ENGINEERING, BUILDING CONSTRUCTON, ETC.

PROFESSOR ARMSTRONG.

Special Course, see under Engineering.

III.—AGRICULTURE.

1*a*. MATHEMATICS.

PROFESSOR CHRYSTAL.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

Senior Class, as for M.A. Synopses, see Faculty of Arts.

1*b*. ZOOLOGY.

PROFESSOR EWART.

For Synopsis of Lectures, see under Faculty of Medicine.

Ic. BOTANY.

PROFESSOR BALFOUR.

For Synopsis of Lectures, see under Faculty of Medicine.

II. NATURAL PHILOSOPHY.

PROFESSOR TAIT.

For Synopsis of Lectures, see under Faculty of Arts.

III. CHEMISTRY.

PROFESSOR CRUM BROWN.

For Synopsis of Lectures, see under Faculty of Medicine.

IV. AGRICULTURE AND RURAL ECONOMY.

PROFESSOR WALLACE.

1. *Definition of Agriculture.*—Aid given by the Allied Sciences.

2. *Surface Geology.*—Formation and Classification of Soils—their Physical and Chemical Properties. Importance of Organic Nitrogen. Indications of good or bad Soils—Methods of Management and Improvement.

3. *Drainage.*—Its Practice and Advantages—Irrigation—Wet-Warping—Mixing or Top-Dressing—Claying—Marling—Chalking—Liming—Paring and Burning—Clay-Burning. The Effect on Soils of Cultivation and the Growth of Plants.

4. *Implements and Machines of the Farm.*—Importance of their proper Construction and careful Management.

5. *Steam Cultivation.*—Advantages and Disadvantages.

6. *Motive Powers Employed on the Farm.*—1st, Man; 2nd, Horse; 3rd, Mechanical Powers (Water, Wind, Steam)—their Values and Advantages.

7. *Farm Servants.*—Labour and Wages—Day-work and Piece-work. Detailed and total costs of Horse and Hand Labour.

8. *Importance of Rotations.*—Different Rotations and reasons why they are adopted—Systems of Farming.

9. *Our Farm Crops* (including Grain, Root, Forage, and Hay Crops).—Selection and Cultivation. Prevention of Diseases.

10. *Identification of Grasses and Valuable Pasture Plants.*—Their Characteristics and Habits—Detection of Adulterations of Seeds—Regulations to protect Farmers in buying Seeds.

11. *The Management of Permanent Pasture.*—Proper Methods of making new Pasture—its After-treatment.

12. *Weeds in Pastures* and Means of Destroying them.

13. *Silage and the System of Ensilage.*—Its Advantages, &c. —Its Suitability and Unsuitability according to Locality.

14. *Manures.*—Farm-yard Manure—Mixing, Storing, and Application—great advantage as a General Manure. Special Manures and so-called Artificials—Times and Methods of their Application. Utilization of Liquid Manure and Town Sewage.

15. *Buildings and Fences.*—Construction of Fences—General Arrangement of Farm-Buildings—best Flooring and Inside Plans and Dimensions of Byres, Cattle-Sheds, Stables, &c.—Covered Yards—Ventilation—Drainage.

16. *Live-Stock.*—Cattle, Pigs, Horses, Sheep, Poultry—Breeds of each, and suitability to Local Conditions—"Principles of Breeding." Feeding and Management—Mixtures of Food. Cost of Producing a Stone of Beef, Mutton, and Pork, showing Profit.

17. *Dairying in all its Branches*, including the suitability of surrounding Conditions—Classes of Dairy Stock, and their Management—Treatment of Milk, its Sale, its Manufacture into Cheese, Butter, &c.

18. *Feeding Stuffs.*—Suitability of Common Food Substances to different Classes of Farm Stock—Purchase and disposal of the same—their Manurial Residues.

Text-Books.—Wallace's "Farm Live Stock of Great Britain," M'Connell's "Note-Book of Agricultural Facts and Figures," Fream's "Elements of Agriculture," "Rothamsted Experiments," and "Soils and their Properties."

Students are requested to consult the Professor at the beginning of the Session as to their plan of work.

Periodical visits will be made to suitable Farms. A Medal may be given for the best report on these excursions.

V. AGRICULTURAL CHEMISTRY.

A. PEEBLES AITKEN, D.Sc., *Lecturer.*

The Course comprises Lectures, Demonstrations, and Laboratory work :—

1. *The Atmosphere.*—The relation of its constituents to plant life—rain, dew, fog, and hoar frost, their causes and effects.

2. *Soils.*—Origin and formation—physical and chemical processes included in the term "weathering"—inorganic and organic constituents of soils—essential elements of fertility—work of living organisms in the soil—decay and putrefaction of vegetable matter—formation of humus—nitrification—relation of soils to air and moisture—capillarity—absorption of salts by soils—lysimetry—circumstances affecting the composition of drainage water—amelioration of soils by physical and chemical means—classification, investigation, and analysis of soils.

3. *Plants.*—Mineral and organic constituents of plants—their transformations and translocations during the life of plants from germination to maturity—respiration, transpiration, and assimilation—plant nutrition, and the specific effects of nutritive substances upon the growth and development of plants—water culture and other methods of investigating plant nutrition—meteorological conditions affecting the health and vigour of plants—sources whence plants derive their nitrogenous constituents—symbiosis—analysis of vegetable substances.

4. *Manures.*—Their classification, composition, and characteristics—specific action and suitability for different soils, climates, and crops—economic use, and the principles regulating their application—methods of conducting manurial experiments—analysis and investigation of manures—valuation of manures, and of unexhausted fertility.

5. *Crops.*—Their composition and classification—fodder crops, their relative value as food—external conditions affecting their nutritive value, preservation, and digestibility—theory of rotations—crop residues and their relation to the fertility of the soil.

6. *Animal Nutrition.*—Chief constituents of the animal body—respiration—digestion—influence of diet on the growth and health of animals—laws of flesh and fat production, and relation of food to work—nutrient ratio as a guide to feeding—animal waste—relation of food to manure—external conditions affecting the health and growth of animals—preparation of fodder—analysis and investigation of feeding stuffs.

7. *Dairy Produce.*—Composition of milk—its physical characters—diseases and sophistications to which it is liable—characteristics of its ingredients—its analysis—butter and cheese—their composition, sophistication, and analysis—scientific aspects of dairy management.

VI. GEOLOGY.

PROFESSOR GEIKIE.

Summer Course, see Pure Science; Winter, see Faculty of Arts.

VII. VETERINARY HYGIENE.

Lectures of recognised teachers of the subject.

VIII. AGRICULTURAL ENTOMOLOGY.

Course of twenty Lectures and Laboratory Demonstrations.

W. FREAM, LL.D., B.Sc., *Steven Lecturer.*

(*Free to Present and Past Students of the Agriculture Class.*)

Position of Insects in the Animal Kingdom.

Morphology and physiology of Insects, particularly in so far as such knowledge is useful in baffling attacks of insect pests. Structural modifications of the mouth, legs, and wings.

Life-history of Insects.

General principle that where the life history involves a series or cycle of changes, the measures of suppression should be directed against the weakest link in the chain. Illustrations.

Methods of insect attack, and enormous losses consequent thereon. Incidentally:—(*a*) Stage in the life-history of the insect at which it becomes actively injurious. (*b*) Period in the growth of the crop when insect injury begins. (*c*) Organs of the plant which are attacked.

Methods of *prevention*, as distinguished from *remedy*.

General methods of prevention or remedy, as distinguished from *special*. The former are, in the main, agricultural. The latter usually involve the application of specific insecticides, or the subjection of the crop to treatment distinct from ordinary agricultural operations.

Insecticides: composition and properties of the more important. Methods of application.

Mechanical appliances for the distribution of insecticides.

Inter-relationship of economic entomology and systematic botany.

Natural enemies of insects; particularly (*a*) insectivorous mammals and birds, (*b*) other insects, (*c*) parasites.

Classification of insects, directed especially to the means of identifying injurious insects in their several stages.

Characters of the natural orders of insects illustrated by genera which furnish destructive species.

Special discussion of the natural orders Coleoptera, Hymenoptera, Lepidoptera, Homoptera, and Diptera.

Convenient groupings of insects—(*a*) According to crop attacked; (*b*) According to mode of attack.

Detailed discussion of insects injurious to crops and to live stock in Britain, with methods of prevention and remedy:—*inter alia*—Wireworms, weevils, turnip-flies, bark beetles, thrips, saw-flies, sirices, surface-caterpillars, winter moths, codlin-moths, goat-moths, leopard-moths, magpie-moths, cabbage butterflies, aphides, scale-insects, mangel-flies, cabbage-flies, onion-flies, Hessian flies, wheat-midges, gout-flies, frit-flies, celery-flies, leather-jackets, ox-warble-flies, sheep's-nostril-flies, gad-flies. Other pests, outside the class Insecta:—as millepedes, arachnids, eelworms.

Present position of Agricultural Entomology in Britain, &c., and remarkable advances made during recent years. The course is profusely illustrated by carefully prepared natural specimens, the characters of which are demonstrated by the Lecturer. The instruction is further facilitated by a unique set of special coloured diagrams, from the pencil of Miss Ormerod.

IX. ECONOMIC SCIENCE AS APPLIED TO AGRICULTURE.

PROFESSOR NICHOLSON.

Lectures up to Christmas, see under Faculty of Arts.

X. (*a.*) FORESTRY.

COLONEL BAILEY, *Lecturer.*

Five days a week, at 10 A.M., during Winter.

1. *Principles of Sylviculture.*—On the general lines of Dr Schlich's "Manual of Forestry," vol. i.

2. *Formation and Tending of Woods.*—On the general lines of Dr Schlich's "Manual of Forestry," vol. ii.

3. *Protection of Standing Woods.*—Treatment of torrents and sandhills; fencing; storms; fires; mammals and birds; insects; diseases; weeds; frost and drought; rain, hail, snow and rime.

4. *Utilisation of Produce.*—Uses of wood; felling and trimming; conversion; measurement and sale; transport; harvesting of bark.

5. *Timber.*—Its structure, characteristics, and identification; relative form and size of stem, branches and roots; durability, loss and gain of moisture: defects.

6. *Working Plans.*—General principles.

7. *Uses and Effects of Forests.*—Direct uses; indirect effects—effects on temperature and moisture, mechanical effects.

8. *Forestry in Scotland.*—General considerations; the financial question.

X. (*b.*) EXPERIMENTAL PHYSICS.

PROFESSOR TAIT.

Full Laboratory Course, see under Faculty of Arts.

X. (*c.*) ENGINEERING.

PROFESSOR ARMSTRONG.

See Winter Course, under Graduation in Engineering.

XI. ENGINEERING FIELD WORK.

PROFESSOR ARMSTRONG.

See under Graduation in Engineering (Summer Session).

Class Prize and Honours Lists.

SUMMER SESSION, 1895.

STRUCTURAL AND FIELD GEOLOGY.

HONOURS CERTIFICATES.—1. W. D. M. Falconer, Blairgowrie, and J. Young Simpson, Edinburgh—equal (*Medallists*); 3. T. Christison Fraser, Edinburgh; 4. W. Blackadder, Broughty Ferry; 5. C. Martin Macfie Campbell, Edinburgh; 6. Arthur Allsebrooke, Nottingham; 7. James Hay, Jedburgh.

JAMES GEIKIE, D.C.L., LL.D., *Professor.*

PETROLOGY.

First-Class Honours.—1. James Miller (*Medallist*); 2. W. P. Meldrum; 3. T. C. Mahalanobis; 4. A. E. Mettam.

JOHN S. FLETT, M.A., B.Sc., M.B.C.M., *Lecturer.*

PRACTICAL ASTRONOMY.

1. John F. Cameron, M.A. (*Medallist*); 2. Jessie Chrystal Macmillan.

RALPH COPELAND, Ph.D., *Professor.*

PLANT PHYSIOLOGY.

1. S. C. Mahalanobis, Calcutta; 2. J. Y. Simpson, M.A., Edinburgh; 3. O. F. Lumsden, Aberdeenshire.

W. G. SMITH, B.Sc., Ph.D., *Lecturer.*

ENGINEERING FIELD WORK.

1. James Hay (*Medallist*); 2. W. Blackadder; 3. A. Allsebrooke; 4. T. G. Fraser; 5. F. W. Stone; 6. E. M. Horsburgh and R. A. M'Conaghy—equal; 8. T. S. Richmond, J. C. Tod, and F. P. Walker—equal; 11. A. M. Douglas and R. M'Culloch—equal.

G. F. ARMSTRONG, M. Inst., C.E., *Professor.*

WINTER SESSION, 1895-96.

APPLIED MATHEMATICS.

Dynamics.

First-Class Honours.—1. W. Blackadder, Broughty Ferry, and E. M. Horsburgh, Kelso—equal (*Medallists*).

C. G. KNOTT, D.Sc., *Lecturer.*

ASTRONOMY.

Class Medal, Prize, and First-Class Certificate.—J. D. Höppner.

RALPH COPELAND, Ph.D., *Professor.*

GEOLOGY AND MINERALOGY.

Medal.—Campbell Brown, Edinburgh.

Honours Certificates.—1. Campbell Brown; 2. J. Y. Simpson, Edinburgh; 3. W. C. Douglas, Sunderland; 4. J. T. Young, Edinburgh; 5. W. W. Smith, Edinburgh; 6. A. C. Smith, Ayrshire; 7. A. Baird, Lauder; 8. W. E. Malherbe, Cape Colony; 9. G. Ednie, Belfast; 10. D. W. Morris, Edinburgh; 11. J. Masson, Edinburgh; 12. E. Woodland; 13. E. J. Raynes, Yorkshire; 14. E. R. Jones, Wales; 15. A. T. Laing, Dundee; 16. J. F. Allan, Nethybridge.

PRACTICAL CLASS.

HONOURS CERTIFICATES.—1. W. W. Smith (*Medallist*); 2. A. Bain and J. Y. Simpson—equal; 4. G. Ednie; 5. W. E. Malherbe; 6. J. Masson; 7. J. F. Allan; 8. J. T. Young. A. C. Smith obtained 87 per cent. in two examinations.

JAMES GEIKIE, LL.D., D.C.L., *Professor.*

ENGINEERING.

1. James Hay (*Medal and First Prize*); 2. W. Blackadder (*Second Prize*); 3. J. C. Tod (*Third Prize*); 4. P. Drummond; 5. Thomas C. Fraser; 6. W. J. Dilley.

G. F. ARMSTRONG, M.A., M.Inst., C.E., *Professor.*

GEOMETRICAL AND MECHANICAL DRAWING.

1. James Hay (*Medal*); 2. W. Blackadder (*Prize*); 3. W. D. M. Falconer; 4. Harry Burdon; 5. Henry W. Simpson; 6. E. M. Horsburgh.

W. HUME KERR, M.A., B.Sc., *Lecturer.*

AGRICULTURAL CHEMISTRY.

1. Sidney F. Ashby and William G. Mason—equal (*Medallists*); 3. D. F. Chalmers and Samuel Milligan—equal; 5. William Bruce and Angus H. Mackenzie—equal; 6. John C. Rushton; 7. George Douglas; 8. Alex. M. MacIntyre; 9. J. Grant Smith.

A. P. AITKEN, D.Sc., *Lecturer.*

AGRICULTURE AND RURAL ECONOMY.

HONOURS CERTIFICATE.—1. William G. Mason, Marsh Grange, Kirkby-in-Furness (*Junior Medal*), and P. A. Salomons, Edinburgh (*Senior Medal*)—equal; 3. A. Allsebrooke, Wollaton, Nottingham, and D. F. Chalmers, Gillespie, Glenluce—equal; 5. J. C. Rushton, Rush Slade Farm, Hilderstone, Stone, Staffordshire; John O. Peet, Wembrick Farm, Aughton, Lancashire; and T. D. Foster, The Mott, Salcombe—equal; 8. Alex. Fraser, Earnside, Forres; 9. Alex. M. Macintyre, Findon Mains, Conon Bridge, Ross-shire; 10. S. F. Ashby, Southport; 11. G. Douglas, M. Rhynie, Fearn, Ross-shire; 12. J. W. Eastham, Blackhurst Farm, Losteck Hall, Preston, Lancashire; 13. John Willison, Parish Holm Douglas; 14. J. G. Smith, Inverallan, Grantown; 15. James Willison, Acharn, Killin; 16. Angus H. Mackenzie, Westfield, Caithness; 17. C. Burness, Edinburgh; 18. A. K. Mackie, Rosebank, Portobello; 19. James Maitland, Home Farm, Tan-y-Bwlch, Merionethshire.

STEVEN SCHOLARSHIP, of about £70.—L. F. Ashby.

HIGHLAND AND AGRICULTURAL SOCIETY PRIZES, amounting to £10. —A. Allsebrooke; D. Chalmers; J. Rushton; W. Mason—equal.

REPORT ON FARM EXCURSIONS.—J. C. Rushton (*Medal*); A. Allsebrooke (*Extra Medal*); J. Grant-Smith (*Highly Commended*).

ROBERT WALLACE, *Professor.*

AGRICULTURAL ENTOMOLOGY.

HONOURS CERTIFICATES.—1. A. Allsebrooke (*Medal*); 2. S. F. Ashby; 3. J. C. Rushton; 4. W. Bruce; 5. G. Douglas; 6. A. M. M'Intyre; 7. A. H. Mackenzie.

W. FREAM, LL.D., B.Sc., *Lecturer.*

FORESTRY.

1. Arthur Allsebrooke, Wollaton, Nottingham (*Medal and Prize of £2*); 2. William A. Lee, Islay (*Prize of £1*); 3. Sydney F. Ashby, Rock Ferry, Cheshire; 4. James Maitland, Inverness; 5. Alexander Porteous, Crieff.

FRED. BAILEY, Lt.-Col., *Lecturer.*

Graduation in Science.

I.—PURE SCIENCE.

A.—REGULATIONS AND CURRICULA FOR DEGREES IN PURE SCIENCE.

Candidates who began attendance on qualifying Science Classes before 1st October 1892, *are referred to the Calendar for* 1895-96 *or previous Calendars.*

Two Degrees in Science are conferred by the University of Edinburgh, viz.:—Bachelor of Science (B.Sc.) and Doctor of Science (D.Sc.). These degrees are given in Pure Science and in Applied Science.

I.—PRELIMINARY EXAMINATION.

The Preliminary Examinations in General Education are held in the Examination Hall in the University, in autumn and spring. (Time-Table, page 132.)

Candidates may obtain Schedules at the Matriculation Office on and after 4th September 1896 and on and after 15th February 1897. The Schedules must be completed and lodged along with the Fees not later than 18th September 1896 and 1st March 1897 for the Autumn and Spring Examinations respectively.

Fee, 10s. 6d. for each appearance.

Candidates may pay the Fees personally, or transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by

Bank Drafts crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts. When names are not entered and Fees paid on or before the stated dates, an additional or late entry fee of 10s. must be paid before the Candidate can be admitted. A Candidate is not held to be entered until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

1. Candidates before entering on the Curriculum must, unless exempted, pass a Preliminary Examination in the following subjects:—[1]
    1. English.
    2. One of the following: — Latin, Greek, French, or German.
    3. Mathematics (Higher).
    4. One of the following:—Latin, Greek, French, or German (if not already taken), Italian,[2] Dynamics.
2. Candidates must pass on the higher standard in Mathematics.
3. *English* includes Grammar and Composition, and the Outlines of Geography and British History, the standard being that presently adopted for the Higher Grade Leaving Certificate of the Scottish Education Department.
4. *Latin* and *Greek* comprise grammatical questions, translations into English from Latin or Greek authors, not previously prescribed, and translations of plain passages or easy sentences from English into Latin or Greek. The standard is that presently adopted for the Lower Grade Leaving Certificate.
5. *French*, *German*, and *Italian* comprise grammatical, literary, and easy philological questions, translation into English from French, German, or Italian authors, not previously prescribed, and translations from English into French, German, or Italian. The standard is that presently adopted for the Higher Grade Leaving Certificate of the Scottish Education Department.
6. *Mathematics* comprises (1) Arithmetic, including Vulgar and Decimal Fractions, Proportion, Percentage, Square Root, Simple Interest; (2) Algebra, including Fractions, Factors, Square Root, Equations of the First Degree, Simultaneous Equations of the First Degree, Easy Quadratic Equations, Problems leading to the above Equations; (3) Geometry—Euclid, Books I., II., III. (or their equivalents), with easy deductions; Books IV., VI., and the first twenty-one propositions of Book XI. (or their equivalents), with deductions, Quadratic Equations, Trigonometry to the solution of Triangles inclusive, and the use of Logarithmic Tables.
7. *Dynamics* includes Elementary Statics and Kinetics of Solids, Liquids, and Gases.

[1] See additional Regulations of Joint Board, page 128.

[2] The following may be in force after 1st October 1896, "or such other Language as the Senatus may approve."

8. A Candidate must pass in all the required subjects at one or not more than two Examinations, provided that he may offer himself for re-examination, as often as may be necessary, to satisfy this condition.
9. Attendance on any Science Class will not qualify for Graduation unless the whole Preliminary Examination has been passed.

II.—Degrees in Pure Science.

1. Candidates for the Degree of B.Sc. must, in the course of not less than three Academical years (*i.e.* three Winter Sessions, or two Winter Sessions, and three Summer Sessions), attend at least seven courses of instruction in the subjects included in the Science Examination which they purpose to undergo.
2. Three of these Courses must be in subjects prescribed for the First Science Examination, and four must be in subjects prescribed for the Final Science Examination.
3. Four of the seven Courses must be taken in the University of Edinburgh. The remaining three Courses may be taken at this University or at other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of Graduation in Science, provided that the fees for attendance at an approved Institution or under a recognised teacher in Edinburgh, shall in all cases not be less than the fees exigible for the corresponding Courses in the University of Edinburgh.[1]
4. Every Candidate for a Degree in Science must produce his Matriculation Ticket for the year in which he appears for Examination or Graduation.
5. All Candidates, not Matriculated Students of this University, availing themselves of the permission to attend Lectures at approved Institutions or by recognised teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names at the Matriculation office, paying a fee of the same amount as the Matriculation Fee, and having, in respect of such payment, a right to the use of the University Library.
6. A Student who before October 1892 has completed a part of his course of study with a view to Graduation in Science under regulations in force at the time in this University, and shall thereafter complete his course of study and pass the necessary Examinations in conformity with such regulations, as with those now in force, may become a Candidate for the Degree of B.Sc.
7. Candidates for Graduation who have previously passed the Examinations are required to intimate to the Clerk to the Senatus their

[1] Only Institutions and Teachers with the necessary staff and appliances for Theoretical and Practical Instruction in Science will be recognised by the University. A List of Universities and Institutions at present recognised in terms of this regulation is given on page 397.

intention to graduate, and pay the Registration fee at least ten days before the date of Graduation. Those whose Examinations are not then completed are required to give such intimation at the earliest possible date, and at latest one clear day before the day of Graduation.

Universities and Institutions at present recognised in Terms of Regulation II. 3.

The Universities of St Andrews, Glasgow, Aberdeen, Oxford, Cambridge, Dublin, and Victoria University, Manchester. Heriot-Watt College:—Mechanics and Physics, as equivalent to one course in Natural Philosophy, qualifying for the first B.Sc. examination in Pure Science; Advanced Chemistry and Chemical Laboratory, as qualifying for the final B.Sc. examination; Electricity (Pure and Applied), Engineering, Laboratory Practice (Mechanical or Electrical), as qualifying for the degree of B.Sc. in Engineering. The Glasgow and West of Scotland Technical College; University College, Dundee; University College, London; King's College, London; The Royal College of Science, South Kensington; The Owens College, Manchester; The Mason College, Birmingham; The College of Science, Newcastle-on-Tyne; The Yorkshire College of Science, Leeds; University College, Bristol; University College, Liverpool; The Firth College, Sheffield; University College, Nottingham; The University College of North Wales, Bangor; University College of Wales, Aberystwith; The University College of South Wales and Monmouthshire; The Engineering College, Cooper's Hill. The Queen's College, Belfast; The Queen's College, Cork; The Queen's College, Galway; The College of Science, Stephen's Green, Dublin; The School of Mines, Dublin; The Royal Agricultural College, Cirencester; The College of Agriculture, Downton; The University College, North Wales, Bangor; and the Veterinary Colleges of the United Kingdom.—The Presidency Colleges in Calcutta, Madras, and Bombay. The Thomasson Engineering College, and the Engineering College, Poona. M'Gill University, Montreal; The University College of Toronto; Queen's University, Kingston, Ontario; The University of Sydney; The University of Melbourne; The University of Adelaide; Wellington College; The University of New Zealand; The University of Otago; Dalhousie College, Halifax, Nova Scotia; Stellenbosch College, South Africa. The University of Harvard; The University of Yale; The Johns Hopkins University. The Universities, and Polytechnic Schools supported and regulated or recognised by the governments of the respective Countries of Europe.

EXAMINATIONS

(A.) Degree of Bachelor of Science.

For the Degree of B.Sc. there are two Examinations, conducted by written questions, as well as orally and practically.

(*a.*) *First Science Examination.*

1. The First Examination for the Degree of B.Sc. is as to the general knowledge of the Candidate on the following subjects :—

(i.) Mathematics, or Biology (*i.e.* Zoology and Botany).
(ii.) Natural Philosophy.
(iii.) Chemistry.

2. The Examination in these subjects is the same as for the ordinary degree of Master of Arts.

3. Candidates may present themselves in any one or more of these subjects at any Examination held after they have attended a full course in the subject or subjects professed.

(*b.*) *Second Science Examination.*

1. The Second B.Sc. Examination is on a higher standard in any three or more of the following subjects :—

(1) Mathematics.
(2) Natural Philosophy.
(3) Astronomy.
(4) Chemistry.
(5) Human Anatomy, including Anthropology.
(6) Physiology, including Histology and Physiological Chemistry.
(7) Geology, including Mineralogy.
(8) Zoology, including Comparative Anatomy.
(9) Botany, including Vegetable Physiology.

2. The standard of this Examination is as nearly as possible equivalent to that of the Examination for the Degree of M.A. with Honours, where the subjects are different : and where the subjects are the same the examination is identical.

3. A subject already taken for the First Examination may be taken also for the Second Examination.

4. Candidates presenting themselves for the Second Examination must have attended four full courses of higher instruction, including practical or laboratory work, in the Subjects professed.

5. The Second Science Examination cannot be taken sooner than one year after the Candidate has passed the First Science Examination.

6. If a student, before passing the Preliminary Examination has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class for examination, on condition of his passing the full Preliminary Examination within such time as the Senatus may appoint.

7. A Candidate for the degree of B.Sc. is not deemed to have attended a class as part of the curriculum for that degree unless he presents a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

8. The Examiners for the degree of B.Sc. have power to report

that a Candidate has passed with special distinction in one or more of the subjects professed by him : and in such a case a Diploma is given setting forth the subjects in respect of which the degree has been granted, and the subject or subjects in which special distinction has been obtained.

9. A Candidate who has passed the First and Second Science Examinations, and otherwise complied with the regulations for Graduation, will be recommended to the Senatus for the Degree of B.Sc.

Courses for Final Examination in Pure Science.

In each subject professed, two written papers are set, namely, a *first* and a *second* paper ; and the Practical and Oral Examinations also consist of *first* and *second* parts. The second part of the Examination is of a higher standard than the first. Candidates must pass the first section of the Examination (as well written as practical and oral) in all the subjects professed. They must also pass the second section in at least one of their subjects. The following Courses of Higher Instruction in this University, (1) Intermediate and (2) Advanced, qualify for the first and second stages of the Final Examination in Pure Science :—

1. Mathematics : (1) *Intermediate Course*, as for Honours in Arts. (2) *Advanced Course*, as for Honours in Arts.

2. Natural Philosophy : (1) *Intermediate* Mathematical, (2) *Advanced* Mathematical, *Advanced* Experimental, or *Special* Laboratory Course.

3. Astronomy : (1) *Intermediate Course :* Winter Lecture Course, including Practical work, (2) *Advanced Course* of Practical Instruction at the Observatory.

4. Chemistry : (1) *Intermediate Course :* One Winter Course, or two Summer Courses, in Laboratory. (2) *Advanced Course :* Further Laboratory Work and one Lecture Course.

5. Human Anatomy, including Anthropology : (1) *Intermediate Course :* Six months' Lectures on Systematic Anatomy (Winter Session), with six months' Practical Anatomy. (2) *Advanced Course :* Course of Anthropology.

6. Physiology : (1) *Intermediate Course :* Six months' Lecture Course and Practical Work (Winter Session). (2) *Advanced Course :* Laboratory Work.

7. Geology, including Mineralogy : (1) *Intermediate Course :* Winter Lecture Course and Practical Class. (2) *Advanced Course :* Laboratory Work, or Advanced Lecture Course.

8. Zoology, including Comparative Anatomy : (1) *Intermediate Course :* Six months' Course, including Lectures on Invertebrate Zoology, and on Embryology, with Laboratory Work. (2) *Advanced Course :* Six months' Course on the Morphology of the Invertebrata and Vertebrata, and Laboratory Work.

9. Botany, including Vegetable Physiology : (1) *Intermediate Course :* Six months' work in Laboratory. (2) *Advanced Course :* Laboratory Work, with one or more Lecture Courses.

REGULATIONS FOR SPECIAL STUDY AND RESEARCH AND FOR APPOINTMEMT OF RESEARCH FELLOWS.

I. The Senatus, with the approval of the University Court, may make regulations under which graduates of Scottish Universities, or of other Universities recognised by the University Court, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or research, may be admitted to prosecute such study or research in the University.

II. It is the duty of the Senatus in each University—

(1) To receive and decide upon all applications for admission to prosecute special study or research.

(2) To prepare a list of all persons admitted as Research Students.

(3) To make regulations for the supervision of their work.

(4) To satisfy themselves from time to time that the Research Students are carrying on their work in a satisfactory manner.

(5) To suspend or exclude from any course any student whose conduct or progress is unsatisfactory.

III. Every applicant must send in to the Senatus a written application stating any degree or other distinction he has obtained, the line of study or research he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. Any application shall be in the first instance referred by the Senatus to the appropriate Faculty, or to a Committee appointed by the Senatus; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—

(*a*) That his proposed line of study or research is fit and proper;

(*b*) That he possesses a good general education;

(*c*) That he is of good character;

(*d*) That he proposes to prosecute his studies or research during a period to be approved by the Senatus.

The Faculty or the Committee shall report to the Senatus on each application. It shall also be their duty, subject to the regulations of the Senatus, to provide for the supervision of the Research Student's work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student shall be required to matriculate each year, paying the ordinary fee.

VI. Research Students have the use of the University Laboratories and Museums, under such conditions as the University Court, after consultation with the Senatus, may determine.

VII. The title of Research Fellow may be conferred by the Senatus with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow.

VIII. (1) The Research Fellows shall be appointed after consideration of the report or reports submitted in terms of Section IV.

(2) The title of Research Fellow may be conferred at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus may determine.

(3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer.

(4) Research Students who have been appointed Research Fellows shall continue subject to the above conditions as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may provide such sums as it may think fit in aid of the expenses of Special Study or Research.

(B.) Degree of Doctor of Science.

1. Graduates of this University who have held the Degree of B.Sc. for five years may offer themselves for the Degree of D.Sc. Candidates must profess one of the following branches of Science:—Mathematics; Natural Philosophy; Astronomy; Chemistry; Human Anatomy, including Anthropology; Physiology, including Histology; Geology, including Mineralogy; Zoology, including Comparative Anatomy; Botany, including Vegetable Physiology; and in this they will be expected to show a thorough knowledge.

2. Masters of Arts of this University with first or second class honours in Mathematics and Natural Philosophy under the conditions prescribed by the present Regulations for Degrees in Arts, or under the Regulations previously in force in this University, may offer themselves for the degree of D.Sc. after the expiry of five years from the date of their graduation in Arts, under the same conditions as if they held the degree of B.Sc.

3. Research Students within the meaning of the Regulations for the Encouragement of Special Study and Research and for the appointment of Research Fellows, may offer themselves for the degree of D.Sc. of the University in which they have prosecuted some special study or research, although they have not taken the degree of B.Sc. or the degree of M.A. with honours as aforesaid, in that University; provided—

(1) That they hold the degree of B.Sc. or Bachelor of Medicine of a Scottish or any recognised University, or a degree of

any such University, which the Senatus shall hold equivalent to the degree of B.Sc. or to the degree of M.A. with first or second class honours in Mathematics and Natural Philosophy; provided that Candidates who hold any such degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of D.Sc., to pass an examination equivalent to an Honours or to a Final Science examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

4. All Candidates for the degree of D.Sc. shall present a Thesis or a published Memoir or Work, to be approved by the Senatus on the recommendation of the Faculty of Science; provided that, if required by the Senatus, the Candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his Thesis, as may from time to time be determined. The Thesis shall be a record of original research undertaken by the Candidate, and shall be accompanied by a Declaration, signed by him, that the work has been done and the Thesis composed by himself.

The Thesis must be sent to the *Dean of the Faculty of Science* on or before 30th April in the year in which the Candidate proposes to graduate.

5. Notwithstanding and in supplement of the Regulations as to Examinations, the Senatus Academicus may appoint such Professors or Lecturers as it may think suitable to conduct the examination of candidates who may offer themselves for the degree of D.Sc., and the University Court shall, after consultation with the Senatus Academicus, appoint an additional Examiner to act along with them. Such additional Examiner shall be a person of recognised eminence in the subject of the thesis, or memoir, or work which is to be submitted for approval. The result of the examination shall be reported to the appropriate Faculty or Committee of Senatus.

6. The degree of D.Sc. shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

Regulations for the Graduation of Women and for their Instruction.

excerpts from ordinance no. 18 (general no. 9).

1. It shall be in the power of the University Court to admit women to graduation.

2. The conditions for graduation shall be the same for women as for men, subject to the following modifications, which shall have effect until provision is made for the instruction of women in all subjects qualifying for graduation, in which provision is made for the instruction of men :—

Section 3 of the Regulations for Degrees in Science shall not be applicable to the graduation of women in Science, so long as within the Faculty provision is not made for the instruction of women in any subject qualifying for graduation in which provision is made for the instruction of men, and it shall be in the power of the University Court to admit to graduation women who have received the requisite instruction in that subject in any other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science: Provided always that every candidate for graduation shall produce evidence of having satisfied the conditions with respect to the Preliminary Examination, and shall be examined in all the subjects necessary for graduation by the Examiners of the University.

3. So soon as within the University provision is made for the instruction of women in all subjects qualifying for graduation in which provision is made for the instruction of men, the conditions for the graduation of women shall be the same as the conditions for the graduation of men.

4. (1) Women who attend classes in the University must matriculate, paying a fee of the same amount as that exigible for other students. (2) Women, who are candidates for graduation but not matriculated students, and who may attend classes within a University town, under the provisions of Section 3 hereof, must, at the commencement of each year of such attendance, enrol their names in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by students of the University.

Additional Regulations by the University Court.

Any woman who has received the requisite instruction in Chemistry, Botany, and Zoology, in any other University or Institution already approved by the University with the view to the Graduation of men, or under any teacher already recognised with that view, or in the Edinburgh School of Medicine for

Women, Surgeon Square, Edinburgh, or in the Medical College for Women, Chambers Street, Edinburgh, will—subject to the provisions of Ordinance[1] No. 18, General No. 9—Regulations for the Graduation of Women, &c., be admitted to Examination in these subjects for Graduation in Science.

Women may attend within the University the advanced Courses in Botany, Zoology, and Chemistry, qualifying for Graduation in Science.

Any woman, not a Matriculated Student of the University, availing herself of the permission to attend the Lectures on Chemistry, Botany, or Natural History, at the above-named Schools of Medicine in Edinburgh, must, at the commencement of each year of such attendance, enrol her name in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

OUTLINE OF EXAMINATIONS.

I.—First Examination.

(*a*1) MATHEMATICS.

The Examinations in Mathematics and in Natural Philosophy are the same as for the Degree of Master of Arts.

(*a*2) ZOOLOGY.

(*a*2) BOTANY.

(*b*) NATURAL PHILOSOPHY.

(*c*) CHEMISTRY.

The Examinations in Zoology, Botany, and Chemistry, are the same as for the First Professional Examination for Degrees in Medicine.

II.—Final Examination.

(*a*) MATHEMATICS.

(*b*) NATURAL PHILOSOPHY.

The Examinations in Mathematics and Natural Philosophy are the same as the Degree of M.A. with Honours.

(*c*) ASTRONOMY.

1. The Principles and Practice of astronomically finding the geographical co-ordinates of the place of observation on land and at sea.

[1] See Ordinance, Appendix to Calendar, 1892-93, page 51.

2. The Principles that guide the actual determination of the chief astronomical constants—*refraction*, *aberration*, *nutation*, *precession*, and *solar-parallax* in fixed observatories.

3. The methods used for determining the figure and size of the earth.

The Candidate will be required to explain the general principles on which the orbits of planets, etc., are calculated, and must show a thorough knowledge of the methods followed in the case either of a *comet*, *planet*, *double-star*, or of a *meteorite* and a *meteoritic swarm*.

One group of observations must have been made in the field, or at an observatory, and fully reduced so as to show the value of the derived results, and the precautions that have been taken to free them from instrumental and personal errors. Candidates will also be examined as to the best ways of testing the critical parts of instruments, such as a *pivot*, *screw*, *level*, etc.

(*d*) CHEMISTRY.

Written and Oral Examinations:—Inorganic, including Mineralogical, Chemistry; Organic Chemistry; Physical Chemistry; Chemical Crystallography; History of Chemistry. Practical Examination:—Complex qualitative Analysis; Quantitative Analysis, including Gas Analysis and Organic Analysis; Preparation of Pure Substances, organic and inorganic; Physico-chemical measurements.

In the written papers a choice of questions is allowed, so as to adapt the examination to the various courses of advanced study which Candidates may have selected.

Exact quantitative determinations are not included in the first part of the practical examination.

(*e*) HUMAN ANATOMY, INCLUDING ANTHROPOLOGY.

Candidates are required to show a competent knowledge of the development of the human body and of its parts and organs; also the position and general arrangement of the different "systems" of organs which enter into its construction, and the structure both of these organs and of the simple tissues. A special knowledge of the locomotory apparatus and of the nervous and vascular systems will be required. An acquaintance with the technical applications of human anatomy to the practice of Medicine and Surgery is not asked for.

The Anthropological part of the subject will embrace a knowledge of race characters as found in the skull and other parts of the skeleton, in the skin, eyes, hair, features, and the external configuration of the body generally. The methods of anthropometrical measurement both of the living body and of the skeleton should be known. The possible influence of use and of external surroundings in producing modifications in the physical characters of man will require attention. An acquaintance with the "types" of mankind and the structural relations of man to the higher mammals will also be expected.

(*f*) ANIMAL PHYSIOLOGY.

The Structure, Chemical Composition, and Functions of the Elementary Tissues of Man and Animals.

The Minute Structure and Functions of the Organs concerned in the Nutrition of Man and Mammals.

The Chemical Composition and Functions of the Foods and Fluids involved in the Process of Nutrition.

The Temperature of Man and Animals.

Human Voice and Speech.

The Minute Structure and Functions of the Organs of Sense, Brain, Spinal Cord, and chief Nerves of Man and other Vertebrates.

In the Oral Examination Candidates will be examined on the above subjects, and will also be required to show their practical acquaintance with Histology, Physiological Chemistry, and Experimental Physiology.

(*g*) GEOLOGY, INCLUDING MINERALOGY.

1. *Dynamical Geology.*—The nature and operation of geological agents:—The Atmosphere, Rain, Terrestrial Waters, Ice, the Sea, Plants and Animals, Volcanoes, Movements of the Earth's Crust.

2. *Mineralogy.*—Physical and Chemical characters of the more important and typical species in the various mineral groups—more especially the rock-forming minerals and ores.

3. *Petrology.*—Macroscopic and Microscopic Characters, Composition, Origin and Distribution of Rocks.

4. *Structural Geology.*—Structure of Rock-masses, Bedding, Joints, Cleavage, Foliation, Metamorphism, Faults, Unconformity.

5. *Stratigraphical Geology.*—The History of the Geological Systems—more especially those of the British Islands.

6. *Palæontological Geology.*—Characters, and distribution in time, of the more important Genera and Orders found fossil in Britain.

7. *Physiographical Geology.*—Origin of the present outlines of the Earth's surface.

(*h*) ZOOLOGY, INCLUDING COMPARATIVE ANATOMY.

1. The Systematic Zoology of the Invertebrate and Vertebrate groups.

2. The Elements of the Comparative Anatomy and Development of the Invertebrata and Vertebrata.

3. The Principles of Natural Selection, a Knowledge of the Geographical Distribution of Vertebrate Animals.

The following books are recommended:—Lang's "Text-Book of Comparative Anatomy;" Huxley's "Vertebrata;" Flower and Lyddeker's "Mammalia;" Vogt and Yung's Practical Zootomy (German or French edition); Darwin's "Origin of Species;" Wallace's "Darwinism" and "Island Life;" Marshall's "Embryology."

(*i*) BOTANY, INCLUDING VEGETABLE PHYSIOLOGY.

1. Morphology (including Anatomy), and Physiology of Plants.
2. The Principles of Plant Classification, and the Systematic Characters of the chief Families of Plants, including the Life Histories of Representative Types.
3 The chief facts of Geographical Distribution, and the explanation of these.
4. The chief facts of Vegetable Palæontology, and their bearing on the Theory of Descent.

II.—ENGINEERING.

B.—REGULATIONS AND CURRICULUM FOR DEGREES IN ENGINEERING.

Candidates who began attendance on qualifying Science Classes before 1st October 1893, *are referred to* CALENDAR 1895-96 *or previous* CALENDARS.

I. Two degrees in Science in Engineering are conferred by the University of Edinburgh—viz., Bachelor of Science in Engineering and Doctor of Science in Engineering.

I.—PRELIMINARY EXAMINATION FOR BACHELOR OF SCIENCE.

II. Every candidate for the degree of B.Sc. in Engineering must pass the Preliminary Examination[1] prescribed for Degrees in Pure Science, and the conditions with respect thereto imposed by the Regulations for Degrees in Pure Science are applicable in all respects to Degrees in Engineering except as follows—viz., the Preliminary Examination must be passed before the candidate presents himself for any part of the First Science Examination, but not necessarily before the candidate enters on his curriculum.

II.—COURSES OF INSTRUCTION.

III. (1) Candidates must, in the course of not less than three Academical years (*i.e.* three Winter Sessions, or two Winter Sessions and three Summer Sessions), attend at least the eleven courses of instruction prescribed under Section VIII. hereof.

(2) It is the duty of the Senatus to determine from time to time which of the said courses are full and which are half courses respectively, and also to determine the number of meetings of which such full courses and half courses respectively shall consist, and to report its determination to the University Court for its approval.

IV. (1) Five full courses or their equivalent (counting two half courses as one full course) must be taken in the University of Edinburgh, and must include the necessary courses in Engineering, except where the University Court, after consultation with the Senatus, sees

[1] See page 395.

fit to allow one of the courses in Engineering to be taken outside the University under the provisions of the next sub-section.

(2) The remainder of the said courses may be taken in other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science in Engineering :[1] Provided that the fees for attendance at an approved Institution in Edinburgh or under a recognised teacher there are not less than the fees exigible for the corresponding courses in the University of Edinburgh.

V. The University Court may make regulations to enable candidates, not matriculated students of the University of Edinburgh, availing themselves of the permission to attend lectures at approved institutions or by recognised teachers in Edinburgh to obtain, on payment of a fee not exceeding in amount the matriculation fee paid by the students of the University, a right to the use of the Library of the University.

VI. (1) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Senatus a scheme specifying what proportion of the courses shall be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Senatus transmits such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(2) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Faculty of Science, for its consideration, syllabuses of the subjects and books proposed for the work of their classes during the next Academical year. The Faculty of Science transmits such syllabuses, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VII. The provisions of the preceding section do not apply to approved Institutions or recognised teachers outside Edinburgh ; but the University Court will not grant or continue recognition to any Institutions or teachers unless it is satisfied that their courses of instruction are equivalent to the courses sanctioned in the University of Edinburgh.

VIII. The subjects of study are as follows :—

1. Mathematics, including Analytical Geometry, and Differential and Integral Calculus.
2. Natural Philosophy, including Applied Higher Mathematics.
3. Chemistry.
4. A course in the Physical Laboratory or in the Chemical Laboratory, or of Practical Chemistry.

5, 6. Two Courses in Practical work in Drawing.

7, 8, 9. Three Courses in Engineering, including Engineering Laboratory Practice, and Field Work.

10. Natural Philosophy, involving Higher Mathematics.
11. One of the following :—
    (*a*) Engineering Laboratory Practice, Mechanical or Electrical (Special Course).

[1] See footnote, page 396.

(*b*) Electricity—Pure and Applied.
(*c*) Geology and Mineralogy.

III.—Science Examinations.

(*a*) *First Science Examination.*

IX. (1) There is a First Science Examination in the three following subjects, viz.:—(1) Mathematics, (2) Natural Philosophy, (3) Chemistry; and the examinations in Natural Philosophy, and in Chemistry are so far as possible practical.

The examination in Geometrical Drawing may be taken either at the First or at the Final Science Examination.

(2) The examination in Mathematics includes the higher branches of Mathematics specified under Mathematics in the Section immediately preceding; but it is optional to Candidates to pass the same examination in this subject as that required for the ordinary Degree of M.A., provided that in that case they will be required, before graduation, to pass an examination in the remainder of the subject.

(3) Candidates may present themselves in any one or more of the subjects of the First Science Examination at any examination held after they have attended a full course in the subject or subjects professed.

The following Classes in the University qualify for the First Science Examination in Engineering:—

1. Mathematics—Intermediate Honours Class (Winter), or Advanced Class (Summer).
2. Natural Philosophy—As for Pure Science Degrees.
3. Chemistry—As for Pure Science Degrees.
4. Physical or Chemical Laboratories—A three months' Course in either.
5. Drawing—Class of Geometrical Drawing during one Winter Session.

(*b*) *Final Science Examination.*

X. (1) There is a Final Science Examination in the remaining subjects specified in Section VIII.; and, if required, in the higher branches of Mathematics as provided in Section IX., Sub-section 2.

(2) Candidates may present themselves in one or more of these subjects at any examination after they have passed the whole of the subjects in the First Science Examination and have attended the required courses in the subjects professed, provided that for this purpose subjects 5, 6, 7, 8, and 9, specified in Section VIII., shall form one subject.

XI. A candidate for the degree of B.Sc. in Engineering is not deemed to have attended a class as part of the curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XII. It is competent to the Examiners for the degree of B.Sc. in Engineering to report that a candidate has passed with special distinc-

tion in one or more of the subjects professed by him ; and in such a case a diploma is given setting forth the subjects in respect of which the degree has been granted, and the subject or subjects in which special distinction has been obtained.

XIII. It is competent to the University Court to modify from time to time the provisions as to the curriculum, in case such modification be rendered desirable by the development of Engineering Science, or in consequence of further provisions having been made within or without the University for the study of any branch of the said Science : Provided that in no case shall the number of full courses of study required be less than the number required for the degree of B.Sc. in Pure Science.

The following Classes in the University qualify for the Final Science Examination in Engineering :—

1. Drawing—Class of Engineering and Mechanical Drawing during one Winter Session.
2. Engineering—(*a*) Class of Systematic Engineering during two Winter Sessions. (*b*) Class of Engineering Field-Work, held in Summer.
3. Engineering Laboratory, or Electricity (Pure and Applied), or Geology and Mineralogy—A three months' Course in either.

IV.—Doctorate of Science in Engineering.

XIV. Graduates of the University of Edinburgh who have held the degree of B.Sc. in Engineering for five years, may offer themselves for the degree of D.Sc. in Engineering.

XV. A candidate for the degree of D.Sc. in Engineering must present a Thesis, or a published memoir or work, to be approved by the Senatus on the recommendation of the Faculty of Science : Provided that, if required by the Senatus, the candidate must pass such examination as may be determined. The Thesis must be a record of original research undertaken by the candidate, or of important engineering work designed by himself, and actually carried out, and must be accompanied by a declaration, signed by him, that these conditions have been satisfied.

General.

XVI. Candidates who produce certificates that they have satisfied all the conditions prescribed by these Regulations, and who have passed the necessary examinations, will be entitled to receive the degrees of B.Sc. in Engineering and D.Sc. in Engineering, as the case may be, on the payment of the fees required.

XVII. A student who, when these Regulations came into operation, had completed a part of his course of study with a view to graduation in Science in Engineering in the University of Edinburgh, under regulations in force at the time, and who thereafter completes his course of study and passes the necessary examinations in conformity

with such regulations, or with the provisions hereof, may become a candidate for the degree of B.Sc. in Engineering.

XVIII. The degrees of B.Sc. and D.Sc. in Engineering are in no case conferred on persons who have not complied with the above conditions, and are not conferred *honoris causâ tantum.*

FIRST BACHELOR OF SCIENCE EXAMINAMION.

Outline of Subjects of Examination.

1. Mathematics, including Analytical Geometry and Differential and Integral Calculus.
2. Natural Philosophy, mainly Practical Physics.
3. Chemistry—Same as for First Examination in Pure Science.

SECOND BACHELOR OF SCIENCE EXAMINATIONS.

1. (*a.*) Engineering—

Field-Work.—Surveying ; Levelling ; Setting out of Work ; Calculation of Quantities.

Properties of Materials.—General Properties, with special knowledge of their Strength, and the Purposes to which they are applied, and some knowledge of their Cost.

Strength and Stability of Structures designed by Civil Engineers.—Metal and Timber Bridges and Roofs. Arches in Masonry. Walls. Retaining Walls. Embankments. Cuttings. Breakwaters. Aqueducts. Pipes. Canals.

Strength and Form of the Elements of Machines.

Design of Combined Structures.—An elementary knowledge of the Design of Bridges and Roofs, of Reservoirs, Embankments, collecting and distributing Machinery of Waterworks, and of the main features of Railway construction, Harbours, and Drainage.

Design of Machinery.—An elementary knowledge of the construction of the Steam Engine, stationary and locomotive, of Prime Movers driven by Water, of Mill-wright work, and the general arrangement of Workshops and Factories.

Prime Movers.—Theory of Heat Engine. The Hot Air Engine. The Steam Engine. The Gas Engine. Turbines and Water Wheels.

Power Transmission—Telodynamic, Hydraulic, Electric.

Engineering Laboratory Practice.

(*b.*) Drawing—

Candidates must exhibit a good knowledge of Geometrical Drawing, including the use of Graphics as applied in the solution of Engineering problems, and be able to represent neatly, in the usual manner employed by engineers, Plans and Sections of Buildings and Machinery, and also to make Engineering Sketches with figured dimensions from actual objects.

2. Natural Philosophy—

Applied Mathematics, chiefly Dynamics.

3. (*a.*) Engineering Laboratory Practice, Mechanical or Electrical.

(*b.*) Electricity—Pure and Applied.

(*c.*) Geology and Mineralogy—

Dynamical Geology.—Nature and Operation of geological agents:—The Atmosphere, Rain, Terrestrial Waters, Ice, the Sea, Plants and Animals, Volcanoes, Movement of the Earth's Crust.

Mineralogy.—Physical and Chemical characters of the more important and typical species in the various mineral groups—more especially the rock-forming minerals and ores.

Petrology.—Macroscopic and Microscopic Characters, Composition, Origin and Distribution of Rocks.

Structural Geology.—Structure of Rock-Masses, Bedding, Joints, Cleavage, Foliation, Metamorphism, Faults, Unconformity.

Physiographical Geology.—Origin of the present outlines of the Earth's surface.

DOCTOR OF SCIENCE EXAMINATION.

A Candidate for this Degree will be required to offer a thesis or published memoir affording evidence of original work, and may also be required to pass a Special Examination.

III.—PUBLIC HEALTH.

C.—Regulations and Curriculum for Degrees in Public Health.

Candidates who commenced attendance on qualifying Science Classes before 1st October 1894 *are referred to the* Calendar *for* 1895-96, *or to previous* Calendars.

I. Two degrees in Science in Public Health are conferred by the University of Edinburgh, viz., Bachelor of Science in Public Health and Doctor of Science in Public Health.

I.—Bachelor of Science.

II. Candidates for the degree of B.Sc. in Public Health must be graduates in Medicine of a University of the United Kingdom, or of some other University recognised for the purpose by the University Court of the University of Edinburgh.

III. Candidates must be matriculated for the year in which they appear for examination or graduation.

(A.)—*First Examination.*

IV. Candidates for the degree of B.Sc. in Public Health, before proceeding to the first examination, must produce evidence (1) that, after their graduation in Medicine, they have worked for at least twenty hours per week during a period of not less than eight

months, of which at least five consecutive months must be in the Public Health Laboratory of the University of Edinburgh, and the remainder in the foresaid Laboratory, or in a Public Health Laboratory recognised for the purpose by the University Court;[1] and (2) that they have attended in this University or any other Scottish University, in addition to the course of lectures in Physics qualifying for graduation in Medicine, such further course in Physics as the Senatus, with the approval of the University Court, shall deem necessary, and such a course of lectures in Geology, extending over not less than three months, as the Senatus with the like approval shall deem sufficient and appropriate.

The Courses in this University which at present qualify in Physics and Geology are Professor Tait's or Dr Knott's Courses in Physics, and Professor Geikie's Winter or Summer Course in Geology.

(B.)—*Second Examination.*

V. Candidates for the degree of B.Sc. in Public Health are not admitted to the second examination for the degree sooner than eighteen months after having taken their degree in Medicine, nor sooner than six months after having passed their first examination for the degree of B.Sc. in Public Health, and they must have attended two separate courses in Public Health in the University of Edinburgh, or in any University of the United Kingdom, or any Indian, Colonial, or Foreign University recognised for the purpose by the University Court, or in such Medical School or under such teacher as may be recognised or approved for the purpose by the University Court, each course consisting of forty lectures at least; one of these courses shall deal with Medicine and the other with Engineering, each in its relation to Public Health, in such manner as the Senatus Academicus, with the approval of the University Court, shall determine.

The lectures in this University which at present qualify are the courses of the Professor of Medical Jurisprudence and Public Health, and the course of instruction (Theoretical and Practical) in Sanitary Engineering and Building Construction by the Professor of Engineering.

They must also give evidence (1) that for six months they have practically studied sanitary work under the Medical Officer of Health of a county or burgh or district, containing a population of not less than 25,000; (2) that they have had three months' clinical instruction regarding fevers and infectious diseases in a hospital recognised as suitable for the purpose by the University Court; and (3) that they have

[1] *Public Health Laboratories and Teachers recognised under this section:—*

Public Health Laboratory of Mason's College, Birmingham,	E. Percy F. Frankland, Ph.D., October 1894.
Liverpool School of Science and Technology,	George Tate, Ph.D., 15 June 1891.
King's College, London,	W. R. Smith, M.D., D.Sc., November 1891.
University of Aberdeen,	Professor Matthew Hay, M.D., 15 February 1891.
Pasteur Institute, Paris,	22 October 1892.

had three months' instruction in Mensuration and Drawing under a teacher recognised for the purpose by the University Court.

VI. There is a first examination for the degree of B.Sc. in Public Health in (1) Laboratory Work, the examination being practical, written, and oral: (2) in Physics; and (3) in Geology, if an examination in Physics or Geology, as the case may be, qualifying for graduation either in Science or Arts has not previously been passed by the candidate.

VII. There is a second examination, written, oral, and as far as possible practical, for the degree of B.Sc. in Public Health in the following subjects, included in the course of instruction in Public Health —viz. (1) Sanitation, (2) Sanitary Law, (3) Vital Statistics, and (4) Medicine in its bearings on Public Health, and the examinations in these subjects are taken at one time.

VIII. The Board of Studies for the Faculty of Science from time to time, with the approval of the Senatus, determines and announces the character of the instruction to be given in the Laboratory, and fixes the standard of the examinations. The examination in Sanitation, provided for under this section, shall include Reports by the candidates on Dwellings, Workshops, Hospitals, and Sanitary Schemes generally.

IX. It is competent for the University Court, after consultation with the Senatus, to modify from time to time the provisions as to the work and instruction hereinbefore specified as necessary for graduating in Science in Public Health, in case such modification may be rendered desirable by the development of the Science of Public Health, or by increase of the facilities provided in the said University or elsewhere for the study of any branch of the said Science.

Schedules of the Subjects of Examination.

Laboratory Work.

(1.) *Examination of Water.*—Physical Properties, Chemical Properties, Microscopical Appearances, Pollution of Potable Waters.

(2.) *Examination of Air.*—Temperature, Pressure, Humidity; Carbonic Acid, Ozone, Micro-organisms, Organic Matter, Noxious Emanations.

(3.) *Examination of Foods.*—Milk, Butter, Butterine, or Oleomargarine, Flour, Bread, Starchy foods, Sugar, Honey, Butcher meat, Fish, Vegetables.

(4.) *Examination of Beverages.*—Tea, Coffee, Cocoa, Alcoholic Beverages, Aërated Waters.

(5.) *Examination of Condiments.*—Salt, Pepper, Mustard, Vinegar, and Preserves; Examination of Lime Juice. Nutritive Value of Dietaries.

(6.) *Sewage.*—Examination of sewage and of effluents after treatment.

(7.) *Soils.*—Temperature, Humidity, Permeability, Chemical Composition, Gases of the Soil, Micro-organisms.

(8.) *Disinfectants and Deodorisers.*—Chemical Examination of the Materials, Determination of their comparative power.

(9.) *Building Materials.*—Chemical and Physical Properties.

(10.) *Clothing.*—Physical Properties of Clothing Materials.

(11.) *Bacteriology.*—Micro-organisms in relation to Epidemic and other Diseases. Culture and recognition of Pathogenic and Non-Pathogenic, Aerobic and Anaerobic, Micro-organisms.

PHYSICS.

(1.) *Laws of Motion and Properties of Matter.*—Elasticity, Density, Porosity, Divisibility, Viscosity, &c.

(2.) Elements of Dynamics of Solid and Fluid Bodies.

(3.) Elementary Experimental Facts regarding Energy in the common phenomena of Sound, Light, Heat, Electricity, and Magnetism.

(4.) *Elements of Astronomy.*—Causes of Tides, Eclipses, Aberration, Precession, &c.

GEOLOGY.

(1.) *Dynamical Geology.*—The nature and operation of Geological agents:—Rain, Underground Water, Rivers, Ice, the Sea, Earthquakes, Volcanoes, Movements of Upheaval and Depression.

(2.) *Mineralogy and Petrology.*—Characters of the more common and widely-distributed minerals and rocks.

(3.) *Structural Geology.*—The structure of rock-masses, more especially Bedding, Joints, Faults, Intrusive Rocks. Water-supply and Draining in connection with Geological Structure. Nature and Origin of Soils and Sub-Soils.

MEDICINE IN ITS APPLICATION TO PUBLIC HEALTH.

The General Pathology of Endemic, Epidemic, and other morbid Processes induced by Environment.

The Causes and Prevention of Endemic and Epidemic Diseases, as well as of Epizootics; of the Contagious or Infectious Diseases; and of those incidental to particular trades, or otherwise produced by the surroundings of the patient. Prophylaxis. Immunity,—conferred and acquired. Vaccination against disease. Nature and Value of Vaccines.

SANITATION.

(1.) *Site and Environment of Dwellings.*—Influence of Position, Aspect, and Climate; Meteorological and Geological Conditions; Soil and Drainage.

(2.) *Water Supply.*—Quantity per head; Relative Eligibility of available Sources of Supply; Estimation of yield; Methods of utilising various Sources of Supply; Storage, Subsidence, and Filtration; Distribution—(α) General, (β) Domestic; Causes, Detection, and Treatment of contaminated Supply.

(3.) *Air Supply.*—Quantity and Temperature, with knowledge of use of instruments employed in their Measurement; Causes and Detection of Impurities; Warming and Ventilation; Characteristics and Fitness of various methods in use.

(4.) *Excreta, Refuse, and Sewage.*—Character and Quantity of in (α) Urban, (β) Rural Districts—

A. Collection and Removal from (1) the Dwelling, (2) the Town or Village; Nature, Practical details, and maintenance of the several methods employed.

B. Disposal: (1) Sanitary, (2) Insanitary methods; Precipitation, Filtration, Irrigation, Discharge; General details of necessary works.

(5.) *General Structural and Mechanical Details of Sanitary Works.*—Character, Fitness, and Qualities of Materials (Brick, Cement, Earthenware, Iron, Lead); Design, setting out, and laying of Sewers; Plumbing and Iron-work.

(6.) *Hospitals.*—Principles of Design and Construction.

(7.) *Infectious and Epidemic Diseases.*—Origin, Modes of Propagation, and Means of Prevention; Epizootics.

(8.) *Disinfectants.*—Selection and application.

(9.) *Effects of Insanitary Conditions.*—Insufficient house accommodation, Vitiation of Air, Impure Water, Bad or insufficient Food.

(10.) *Unhealthy Occupations.*—Means of mitigating or removing their unhealthiness.

(11.) *Nuisances.*—Urban, Rural, and Domestic.

(12.) *Disposal of the Dead.*—Burial, Cremation.

N.B.—Candidates are required to be able to interpret plans submitted to them, and to illustrate their answers when necessary by sketch plans and diagrams drawn to scale.

SANITARY LAW.[1]

Sanitary Administration. Laws affecting Factories, Workshops, Mines, Common Lodging-houses, Removal of Refuse, Nuisances, Rivers Pollution, Alkali Works, Burial Grounds, Unwholesome Food, Adulteration of Food and Drugs. Sale of Poisons.

VITAL STATISTICS.

Leading facts as regards Population, Birth and Death Rates, Distribution of Diseases.

II.—DOCTORATE OF SCIENCE.

X. Graduates who have held the degree of B.Sc. in Public Health from the University of Edinburgh for a term of five years may offer themselves for the degree of D.Sc. in Public Health in the said University.

XI. Candidates for the degree of D.Sc. in Public Health must present a thesis, or a published memoir or works, to be approved by the Senatus, on the recommendation of the Faculty of Science, and are required to pass an examination in Public Health, and in such of its special departments as the Senatus, with the approval of the University Court, may determine.

The theses, or published memoirs or works, must be records of original research undertaken by the candidates, and must be accom-

[1] A knowledge of the Sanitary Law of any part of the British Dominions will be sufficient.

panied by a declaration, signed by them, that the work has been done and the theses or memoirs composed by themselves.

GENERAL.

XII. Candidates who produce certificates that they have satisfied all the conditions prescribed by this Ordinance, and who have passed the necessary examinations, are entitled to receive the degrees of B.Sc. in Public Health and D.Sc. in Public Health, as the case may be, on payment of the fees required.

XIII. Students who, at the time when these Regulations come into operation, have completed a part of their course of study with a view to graduation in Science in Public Health in the University of Edinburgh, under regulations in force at the time therein, and thereafter completes the course of study and passes the necessary examinations in conformity with such regulations, or with the provisions hereof may become candidates for the degree of B.Sc. in Public Health.

XIV. The degrees of B.Sc. and D.Sc. in Public Health are in no case conferred on persons who have not complied with the conditions hereinbefore set forth, and are not conferred *honoris causâ tantum.*

IV.—AGRICULTURE.

D.—REGULATIONS AND CURRICULUM FOR GRADUATION IN AGRICULTURE.

Candidates who began attendance on Qualifying Science Classes before 1st October 1893, *are referred to Calendar* 1895-96, *or to previous Calendars*

I. A degree of Bachelor of Science in Agriculture is conferred by the University of Edinburgh.

I. PRELIMINARY EXAMINATION.

II. Every candidate for the degree of B.Sc. in Agriculture must pass the Preliminary Examination[1] prescribed for Degrees in Pure Science; and the conditions imposed with respect thereto by the said Regulations are applicable in all respects to the Degree in Agriculture, except as follows:—The Preliminary Examination must be passed before the candidate presents himself for any part of the First Science Examination, but not necessarily before the candidate enters on his curriculum.

COURSES OF INSTRUCTION.

III. (1) Candidates must, in the course of not less than three Academical years (*i.e.* three Winter Sessions, or two Winter Sessions and three Summer Sessions), attend at least eleven courses of instruction in subjects prescribed for examination under Section VIII. hereof.

(2) It is the duty of the Senatus to determine from time to time

[1] See page 395.

which of the said courses are full courses and which are half courses respectively, and also to determine the number of meetings of which such full courses and half courses respectively shall consist, and to report its determination to the University Court for its approval.

IV. (1) Five full courses or their equivalent (counting two half courses as one full course) must be taken in the University of Edinburgh, and must include the course in Agriculture and Rural Economy.

(2) The remainder of the said courses may be taken in other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science in Agriculture :[1] Provided that the fees for attendance at an approved Institution in Edinburgh or under a recognised teacher there must not be less than the fees exigible for the corresponding courses in the University of Edinburgh.

(3) Residence and practical work at a farm is required of each candidate to such an extent and under such regulations as the Senatus, with the approval of the University Court, may from time to time appoint.[2]

V. The University Court may make regulations to enable candidates, not matriculated students of the University of Edinburgh, availing themselves of the permission to attend lectures at approved Institutions or by recognised teachers in Edinburgh, to obtain, on payment of a fee not exceeding in amount the matriculation fee paid by the students of the University, a right to the use of the Library of the University.

VI. (1) It is the duty of the Professors and Lecturers annually, at the end of each winter session, to submit to the Senatus a scheme specifying what proportion of the courses is to be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Senatus transmits such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(2) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Faculty of Science, for its consideration, a syllabus of the subjects and books proposed for the work of their classes during the next Academical year. The Faculty of Science transmits such syllabus, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VII. The provisions of the preceding section do not apply to approved institutions or recognised teachers outside Edinburgh ; but the University Court will not grant or continue recognition to any Institutions or teachers unless it is satisfied that their courses of instruction are equivalent to the courses sanctioned in the University of Edinburgh, where such exist.

VIII. The subjects of study are as follows :—

1. Mathematics, or Biology (*i.e.* Zoology and Botany).
2. Natural Philosophy.
3. Chemistry.

[1] See footnote, p. 396.

[2] Residence and Practical work at a farm must be not less than twelve months.

4. Agriculture and Rural Economy.
5. Agricultural Chemistry.
6. Geology.
7. Veterinary Hygiene.
8. Agricultural Entomology.
9. Economic Science as applied to Agriculture.
10. A course in one of the following :—(*a*) Forestry ; (*b*) Experimental Physics ; (*c*) Engineering.
11. Engineering Field Work.

II. Science Examinations.

(*a*) *First Science Examination.*

IX. (1) There is a First Science Examination in the three following subjects—viz. (1) Mathematics, or Biology (*i.e.* Zoology and Botany) ; (2) Natural Philosophy ; (3) Chemistry.

(2) The examination in all these subjects is the same as the examination in these subjects for the degree of B.Sc. in Pure Science, as specified in the Regulations therefor.

The following courses in this University qualify for the First Science Examination in Agriculture :—

1. (1) Senior Mathematics of 100 Lectures, as for the degree in Pure Science, or (2) Biology (Zoology, Botany) as for Pure Science.
2. Natural Philosophy, as for Pure Science.
3. Chemistry, full course, as for Pure Science.

(3) Candidates may present themselves in any one or more of the subjects of the First Science Examination at any examination held after they have attended a full course in the subject or subjects professed.

(*b*) *Final Science Examination.*

X. (1) There is a Final Science Examination in the remaining subjects (4 to 11 inclusive) specified in Section VIII. hereof.

(2) Candidates may present themselves in any one or more of these subjects at any examination held after they have passed the whole of the subjects comprised in the First Science Examination, and have attended the required courses in the subjects professed.

The following courses qualify for the Final Science Examination in Agriculture :—

1. Agriculture and Rural Economy—Full course of about 100 Lectures and 10 Field Demonstrations.
2. Agricultural Chemistry—Full course of about 100 hours, including practical work in the Laboratory.
3. Geology—Half-course of 25 Lectures, 10 Demonstrations in Laboratory, and 8 Field Demonstrations.
4. Veterinary Hygiene—Half-course of about 50 Lectures.
5. Agricultural Entomology—Half-course of about 20 hours.
6. Economic Science, as applied to Agriculture—Half-course of about 40 Lectures—the Political Economy Class in Arts till Christmas,

7. A course in one of the following :—

(*a*) Forestry—Full course of about 100 Lectures.

(*b*) Experimental Physics—Full Laboratory course of 100 hours.

(*c*) Engineering—Full course of about 100 hours.

8. Engineering Field Work :—Half-course, extending over three weeks, 75 hours—Lectures, Drawing Office, and Field.

XI. If a student, before passing the Preliminary Examination, has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class for graduation, on condition of his passing the full Preliminary Examination within such time thereafter as the Senatus may appoint, and in every such case the Senatus reports to the University Court the reasons for the relaxation.

XII. A candidate for the degree of B.Sc. in Agriculture shall not be deemed to have attended a class as part of the curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

General.

XIII. Candidates who produce certificates that they have satisfied all the conditions prescribed by these Regulations, and who have passed the necessary examinations, will be entitled to receive the degree of B.Sc. in Agriculture, on payment of the fees required.

XIV. A student who, at the time when these Regulations came into operation, had completed a part of his course of study with a view to graduation in Science in Agriculture in the University of Edinburgh, under regulations in force at the time therein, and who thereafter completes his course of study and passes the necessary examinations in conformity with such regulations, or with the provisions of these Regulations, may become a candidate for the degree of B.Sc. in Agriculture.

XV. The degree of B.Sc. in Agriculture shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causâ tantum*.

OUTLINE OF SUBJECTS OF EXAMINATION.

FIRST BACHELOR OF SCIENCE EXAMINATION.

1. (*a*) Mathematics, or (*b*) Biology (*i.e.* Zoology and Botany).
2. Natural Philosophy.
3. Chemistry (not including Practical Chemistry).

The Examinations are the same as for the First B.Sc. in Pure Science.

FINAL BACHELOR OF SCIENCE EXAMINATION.

1. Agriculture and Rural Economy: Its Scientific Practice.

1. *Definition of Agriculture.*—Aid given by the Allied Sciences.

2. *Surface Geology.*—Formation and Classification of Soils—their Physical and Chemical Properties. Importance of Organic Nitrogen. Indications of good or bad Soils—the Methods of Management.

3. *Drainage.* — Its Practice and Advantages — Irrigation—Wet-Warping — Mixing or Top-Dressing—Claying—Marling—Chalking—Liming—Paring and Burning—Clay-Burning. The Effect on Soils of Cultivation and the Growth of Plants.

4. *Implements and Machines of the Farm.*—The Importance of their proper Construction and Careful Management.

5. *Steam Cultivation.*—Its Advantages and Disadvantages.

6. *The Motive Powers Employed on the Farm.*—1st, Man; 2d, Horse; 3d, The Mechanical Powers (Water, Wind, and Steam)—their Comparative Values and Advantages.

7. *Farm Servants.*—Their Labour and Wages — Day-work and Piece-work. Detailed and total costs of Horse and Hand Labour.

8. *The Importance of Rotations.*—Different Rotations and reasons why they are adopted—Systems of Farming.

9. *Our Farm Crops* (Grain, Root, Forage, and Hay Crops).—Their Selection and Growth—Prevention of Insect Injuries and Diseases.

10. *Identification of Grasses and other Valuable Pasture Plants.*—Character and Habits of those of importance—Detection of Adulterations.—Regulations necessary to protect the Farmer in buying Seeds.

11. *The Management of Permanent Pasture.*—Proper Methods of making new Pasture—its After-treatment.

12. *Weeds in Pastures* and Means of Destroying them.

13. *Silage and the System of Ensilage.*—Its Advantages, &c.—Its Suitability and Unsuitability according to Locality.

14. *Manures.*—Farm-yard Manure — its proper Mixing, Storing, and Application—its great advantage as a General Manure. Special Manures and so-called Artificials — their Uses, Abuses, and Adulterations — the proper Times and Methods of their Application. The Value and Use of Liquid Manure and Town Sewage.

15. *Buildings and Fences.*—The proper Construction of Fences—the General Arrangement of Farm-Buildings—the best Flooring and Inside Plans and Dimensions of Byres, Cattle-Sheds, Stables, &c.—Covered Yards—Ventilation—Drainage of Houses and Farm-yards.

16. *Live-Stock, embracing Cattle, Pigs, Horses, Sheep*—The Various Breeds of each, and suitability of some to Local Conditions—"The Principles of Breeding." Feeding and Management—Cost of Feeding—Proper Mixtures of Food to Use. Cost of the Production of a Stone of Beef, Mutton, and Pork, showing the Amount of Profit in each Case.

17. *Dairying in all its Branches*, including the suitability or other-

wise of surrounding Conditions - the proper Classes of Dairy Stock to keep, and their Management—the Treatment of Milk, and its Sale or Manufacture into Cheese, Butter, &c.

18. *Feeding Stuffs.*—Suitability of the Common Food Substances to the Different Classes of Farm Stock—The Purchase, Storing, and Administration of the same—their Manurial Residues.

2. Agricultural Chemistry.

1. *Atmosphere.*—Relation of its Constituents and Conditions to Plant Life.

2. *Soils.*—Origin, Formation, Composition, Biology, Amelioration.

3. *Plants.*—Constituents, Germination, Nutrition, Maturation, Symbiosis.

4. *Manures.*—Nature, Uses, Application, Valuation, Compatibility, Exhaustion.

5. *Crops.*—Classification, Relation, Preservation, Uses as Fodder, Residual Value.

6. *Animal Nutrition.*—Nutritive Processes, Laws of Flesh and Fat Production, Digestibility of Fodders, Nutrient Ratio, Relation of Food to Work and to Manure.

7. *Dairy.*—Composition of Dairy Products, Circumstances affecting Quantity and Quality, Scientific Management.

(*a*) *Qualitative Analysis.*

Tests for the detection of Potassium, Sodium, Ammonium, Magnesium, Calcium, Aluminium, Iron, Arsenic, Antimony, Copper, Lead, Mercury.

Sulphate, Sulphite, Sulphide, Phosphate, Carbonate, Nitrate, Chloride, Acetate, Oxalate, Tartrate, Citrate.

Sugars, Starches, Fats, Proteids.

Chemical, Physical, and Microscopic Tests for Adulteration in Manures, Feeding Stuffs, and Dairy Produce.

(*b*) *Quantitative Analysis.*

Determination of Clay, Sand, Carbonates, Humus, and Moisture in Soils.

Phosphoric Acid, Potash, Nitrogen, Lime, Magnesia, Insoluble Matter and Moisture in Soils and Manures.

Albumen, Amides, Fat, Carbohydrates, Woody Fibre, and Ash in Fodders.

3. Geology.

(1.) *Physical Geography and Dynamical Geology.*—The nature and operation of Geological agents:—Rain, Underground Water, Rivers, Ice, the Sea, Life, Earthquakes, Volcanoes, Movements of Upheaval and Depression.

(2.) *Mineralogical and Petrological Geology.*—Characters of the principal Rock-forming Minerals: Composition, Origin, and Distribution of the more important and commonly occurring Rocks.

(3.) *Structural Geology.*—The Structure of Rock-masses, more especially Bedding, Joints, Faults, and Denudation.

(4.) *Agricultural Geology.*—Nature and Origin of Soils and Subsoils; Draining in connection with Geological Structure; Mineral substances used as Manures.

4. Veterinary Hygiene.

1. The Comparative Osteology (rudimentary) of the Horse, Ox, and Sheep.

2. The Physiology of Dentition in Horse, Ox, Sheep, and Pig, more especially as indicative of the Age of the Animal.

3. The Physiology of Gestation; the Diseases incidental to the pregnant state, and also those consequent to the act of parturition.

4. Description of the Digestive Organs of the Horse, Ox, and Sheep (separately), also their Physiology, and most ordinary Diseases.

5. Contagious and other Diseases of Farm Stock. Prevention and Treatment of Diseases.

5. Agricultural Entomology.

Insect pests of cultivated plants and of farm live stock. Methods of prevention of, and of remedy for, their attacks. Classification of insects, and details of their structure and life history, in so far as of economic importance.

6. Economic Science as applied to Agriculture.

1. The Food Supply of the United Kingdom. 2. The Wages of Agricultural Labour. 3. The Profits of the Farmer. 4. The Rent of Land and Causes of Variations in Rent. 5. Contracts for the Hire of Land. 6. The Risks of Long Leases. 7. Compensation for Improvements. 8. Fixity of Tenure and its Effects. 9. The Prices of Agricultural Produce. 10. Foreign Competition. 11. Effects of the Appreciation of Gold and the Depreciation of Silver. 12. Effects of various Imperial and Local Taxes on Agriculture.

7 (*a*). Forestry.

1. *Sylviculture.*—Atmosphere, Climate, and Soil, as affecting Forest Vegetation; shape and development of forest trees; pure and mixed woods; the sylvicultural systems; formation and tending of woods.

2. *Injuries to Standing Woods and their Protection.*—Storms, fires, animals, fungi, weeds, frost, snow, &c.

3. *Utilisation of Produce.*

4. *Structure, Classification, and Technical Properties of Timber.*

5. *Forest Organisation.*—The principles on which working plans are based.

6. *Uses and Effects of Forests.*

7 (*b*). Experimental Physics.

The Measurement of Physical Constants, such as—Gravitation, Specific Gravity, Specific Heat, Conductivity, Dilatation, Refractive Index, Magnetic and Electric Quantities, &c.

7 (*c*). Engineering.

1. *Mechanics.*—(*a* Principles of Statics; couples; moments of forces; parallel and inclined forces; centre of gravity; moments of inertia; friction. (*b*) Principles of Kinematics and Kinetics; Newton's laws of motion; Conservation and transformation of energy.

2. *Strength and Properties of Structural Materials*, including their fitness and adaptability, together with some knowledge of their cost.

3. *Strength and Stability of Structures.*—General knowledge of the design, construction, and maintenance of Roads, Roofs, Bridges, Embankments, Retaining Walls, Aqueducts, and General Buildings.

4. *Hydraulics.*—The laws governing the flow of water in open and closed channels, and its discharge through orifices; Systems of Drainage and Irrigation; Pumps, &c.

5. *Mechanism and Machinery.*—General Principles and means of transmission, conversion, and modification of motion; general millwright work with special reference to the machines ordinarily employed for agricultural purposes.

6. *Prime Movers.*—A knowledge of the sources and modes of estimating power; The Steam Engine; Pneumatic Machines; Hydraulic Motors, Water-wheels, Turbines, &c.

8. Engineering Field Work.

Surveying, with special reference to Estate and Parish Surveying, Levelling, Gauging of Streams and Rivers, Plotting of Surveys and Sections, Setting out of Work, and Calculation of Quantities.

Fees for Examinations for Degrees.

1. Preliminary Examination.

The Fee is 10s. 6d. for each appearance.

2. Fees for Examinations or for Registering Equivalents.

(1) *Pure Science, Engineering, and Public Health—*

First B.Sc. Examination, (or for each subject, £1, 1s.)	£3 3 0
Second B.Sc. Examination,	3 3 0
Doctor of Science,	10 10 0
	£16 16 0

(2) *Public Health—*

First B.Sc. Examination,	£3 3 0
Second B.Sc. Examination,	3 3 0
For the Degree of Doctor,	10 10 0
	£16 16 0

(3) *Agriculture—*

First B.Sc. Examination, (or for each subject, £1, 1s.)	£3 3 0
Second B.Sc. Examination,	3 3 0
	£6 6 0

Candidates for the Degree of B.Sc. who fail to pass pay a fee of 10s. 6d. for re-examination in each subject, and Candidates for D.Sc. pay a fee of £5, 5s. for each re-examination.

Every Candidate for Graduation must pay the Fee of £1 for Registration as a Member of the General Council of the University, at least one clear day before the date of Graduation.[1]

All communications relating to the Curriculum and Examinations for Degrees, Fellowships, Scholarships, &c., in Science should be addressed to *The Dean of the Faculty of Science*, University, Edinburgh.

All Examination, Matriculation, and Registration Fees are payable at the *Matriculation Office*, University. Candidates may pay the Fees personally, or transmit them to T. GILBERT, by *Post Office*, or *Postal Orders*, or by *Bank Drafts*, crossed "Union Bank of Scotland (Hunter Square Branch), Edinburgh," and not by cheques on private accounts.

DATES OF EXAMINATIONS, FOR PRESENTING CERTIFICATES, AND PAYMENT OF FEES.[2]

PRELIMINARY EXAMINATION.[2]

1896.		
Sept. 18.	Fri.	Names to be given in, and Fees paid, *on or before* this date.
,, 25.	Fri.	Italian, 2-5.
,, 26.	Sat.	English, 9-11, 12-2; Lower Greek, 3-6.
,, 28.	Mon.	Lower Latin, 9-12.
,, 29.	Tu.	Higher Latin, 9-11, 12-2; French, 1st paper, 3-4.30.
,, 30.	Wed.	Higher Greek, 9-11, 12-2; German, 1st paper, 3-4.30.
Oct. 1.	Thur.	Higher Mathematics, 9-11, 12-2; French, 2nd paper, 3-5.
,, 2.	Fri.	German, 2nd paper, 9-11; Dynamics, 1-4.
1897.		
Mar. 1.	Mon.	Names to be given in, and Fees paid, *on or before* this date.
,, 26.	Fri.	Italian, 2-5.
,, 27.	Sat.	English, 9-11, 12-2; Lower Greek, 3-6.
,, 29.	Mon.	Lower Latin, 9-12.
,, 30.	Tu.	Higher Latin, 9-11, 12-2; French, 1st paper, 3-4.30.

[1] Candidates should apply for their Diplomas at the Matriculation Office, immediately after obtaining the Degree. There is no additional charge for the Diploma. Any Graduate who cannot apply personally for his Diploma, is required to give written authority to some person to receive and give a receipt for it.

[2] When names are not entered, nor fees paid, on or before the stated dates, a late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination. A Candidate is not held to have entered for the examination until his name is entered, all the necessary certificates, &c., lodged, and the fee paid.

1897.		
Mar. 31.	Wed.	Higher Greek, 9-11, 12-2; German, 1st paper, 3-4.30.
April 1.	Thur.	Higher Mathematics, 9-11, 12-2; French, 2nd paper, 3-5.
,, 2.	Fri.	German, 2nd paper, 9-11; Dynamics, 1-4.
1896.		First Science Examination.[1]
Oct. 1.	Thur.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 8.	Thur.	Mathematics, 9-11, 11.30-1.30; Natural Philosophy, 2.30-4.30.
,, 9.	Fri.	Natural Philosophy, 9-11; Additional Mathematics for Engineering, 11.30-1.30, 2.30-4.30.
1897.		
Mar. 9.	Tu.	Names to be given in, and Fees paid, *on or before* this date.
,, 19.	Fri.	Certificates to be examined.
,, 20.	Sat.	Practical Chemistry, at hours to be announced (also on subsequent days if necessary).
,, 22.	Mon.	Chemistry, 10-12; Botany, 1-3; Oral Examination may begin; Laboratory Work (Public Health), 10-12; Physics (Public Health), 1-3.
,, 23.	Tu.	Zoology, 10-12; Geology (Public Health), 1-3.
,, 24.	Wed.	Practical Work in Public Health Laboratory begins.
,, 31.	Wed.	Mathematics, 3-5.
April 1.	Thur.	Mathematics, 9-11; Additional Mathematics for Engineering, 2-5; Drawing (Geometrical), 9-12.
,, 2.	Fri.	Natural Philosophy, 9-11, 11.30-1.30.
July 9.	Fri.	Names to be given in, and Fees paid, *on or before* this date.
,, 16.	Fri.	Certificates to be shown.
,, 17.	Sat.	Practical Chemistry at hours to be announced (also on subsequent days if necessary).
,, 19.	Mon.	Chemistry, 10-12; Botany, 1-3; Oral Examination may begin. Laboratory Work (Public Health), 10-12; Physics (Public Health), 1-3.
,, 20.	Tu.	Zoology, 10-12; Geology (Public Health), 1-3.
,, 21.	Wed.	Practical Work in Public Health Laboratory begins.
1896.		Final Science Examination.[1]
Oct. 1.	Thur.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 9.	Fri.	Zoology, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.

[1] See footnote 2, page 425.

1896			
Oct.	10.	Sat.	Astronomy, 9-12 (1st paper), 1-3 (2nd paper).
1897.			
Mar.	9.	Tu.	Names to be given in, and Fees paid, *on or before* this date.
,,	17.	Wed.	Economic Science (Agriculture), 9-11.
,,	19.	Fri.	Certificates to be examined.
,,	22.	Mon.	Botany, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged; Veterinary Hygiene, 1-3. Medicine (Public Health), 10-12; Sanitary Law, 1-3; Vital Statistics, 4-6.
,,	23.	Tu.	Sanitation, 10-12, 1-4; Geology (Agriculture and Engineering), 1-3.
,,	24.	Wed.	Agriculture, 9-12; Agricultural Chemistry, 1-3; Practical Examination in Agricultural Chemistry, at time to be arranged. Oral and Practical Examinations in Public Health subjects begin.
,,	25.	Thur.	Physiology, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.
,,	29.	Mon.	Mathematics, 9-12, 2-5; Engineering, 9-11, 3-5.
,,	30.	Tu.	Mathematics, 9-12; Natural Philosophy, 2-5; Engineering, 9-12; Dynamics (Engineering), 2-5.
,,	31.	Wed.	Natural Philosophy, 9-12, 2-5; Experimental Physics, 9-12; Engineering, 9-11; Engineering (Agriculture), 9-11; Experimental Physics (Agriculture), 3-5.
April	1.	Thur.	Agricultural Entomology, 9-11; Forestry, 11.30-1-30; Drawing (Engineering), 9-12, 2-5.
July	9.	Fri.	Names to be given in, and Fees paid, *on or before* this date.
,,	16.	Fri.	Certificates to be examined.
,,	19.	Mon.	Chemistry, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.
,,	20.	Tu.	Geology, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.
,,	21.	Wed.	Human Anatomy (including Anthropology), 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.

Doctor of Science.[1]

D.Sc. Candidates are required to lodge their Theses and proof of their eligibility with the *Dean of the Faculty of Science* at the Matriculation Office, and to pay the Fees on or before 30th April of the year in which they propose to graduate.

[1] See footnote 2, page 425.

Examination Papers for Degrees in Science.

PRELIMINARY EXAMINATION.

[*For Papers in the Preliminary Subjects, see pages* 157-216.]

FIRST SCIENCE EXAMINATION.

Pure Science.

[*For Papers in Mathematics and Natural Philosophy, see Papers in these Subjects for the Degree of M.A.: and for Papers in Chemistry, Botany, and Zoology, see Papers for First Professional Examination for Degrees in Medicine.*]

Engineering.

MATHEMATICS.

(*Additional to Pass Examination for ordinary Degree of M.A.*)

THURSDAY, *2nd April* 1896.—2 *to* 5 *o'clock.*

1. Find the equation to the tangent to an ellipse at a point on it whose eccentric angle is given.

Shew that the chord joining the extremities of two conjugate diameters of an ellipse constantly touches another ellipse.

Determine the maximum and minimum values of the length of this chord.

2. Find the locus of the middle points of a system of parallel chords of a parabola.

Find the locus of the points of trisection of the same system.

3. Prove that if

$$x : y : 1 = at^2 + bt + c : a't^2 + b't + c' : a''t^2 + b''t + c''$$

t being a variable parameter, the locus of the point (x,y) is a conic. Find the values of t for which (xy) lies at infinity, and the condition that the curve is an ellipse. If $a'' = c'' = 0$, shew that the curve is a hyperbola and find its eccentricity.

4. State and prove the theorem of Leibniz.

Find the nth differential co-efficient of $1/(x^2 - 4x + 3)$.

Shew that the value of $\frac{d^{2n}}{dx^{2n}}(e^x \cos x)$, when x is put equal to zero, is equal to the real part of $(1 + i)^{2n}$.

5. Shew how you would proceed to find the maximum and minimum values of a function of a single variable, and to discriminate between them.

The base a, and the vertical angle A, of a triangle ABC are kept fixed. Prove the following relations :—

$$db(b - c\cos A) + dc(c - b\cos A) = 0 \quad \text{(i.)}$$
$$bdB - \tan B db = 0 \quad \text{(ii.)}$$

Find the maximum value for the sum of the perpendiculars of the triangle.

6. If a point move so that the sum of its distances from two fixed points A, B is constant, shew that the tangent and normal to its locus divide AB externally and internally in the same ratio.

Shew that the curve is an ellipse and determine its axes.

7. Find the equation to the normal at any point of the curve $f(x,y) = 0$.

Shew that in general nine normals may be drawn from a given point to the curve

$$(x/a)^3 + (y/b)^3 = 1$$

and that of the normals from the origin only three are real. Find the points in which these three meet the curve.

Trace the curve $x^4 - y^4 = a^2xy$.

8. How far does the symbol $\frac{d}{dx}$ obey the fundamental laws of Algebra?

Shew that $\left(\frac{d^4}{dx^4} + 4a^4\right)^n \cosh ax \cos ax = 0$.

If a_n is the co-efficient of x^n in the expansion of $e^{x/(x+c)}$ in ascending powers of x, shew that

$$(n+1)c^2a_{n+1} + (2nc+1)a_n + (n-1)a_{n-1} = 0$$

and obtain the expansion to x^4.

9. If $f(x)$ is finite and continuous from $x = a$ to $x = b$ and $x_1, x_2 \ldots, x_n$ are n arithmetic means between a and b, then $(x_1 - a) f(a) + (x_2 - x_1) f(x_1) + \ldots + (b - x_n) f(x_n)$, and $(x_1 - a) f(x_1) + (x_2 - x_1) f(x_2) + \ldots + (b - x_n) f(b)$ tend to the same limit when n becomes infinite.

Shew that $\int_{-c}^{c} dx\, f(a-x) = \int_{-c}^{c} dx\, f(a+x)$.

10. Shew how to find the length of the arc of a curve whose equation in Cartesian co-ordinates is given.

Find the length of the arc of the curve $y = \frac{1}{2a}\left(e^{\frac{x}{a}} + e^{-\frac{x}{a}}\right)$ lying between the points on it whose x-co-ordinates are 0 and α.

Find the area of the sector cut off between the arc and the chord joining these two points.

11. Shew how to integrate $I = f(x)/\varphi(x)$, where $f(x)$ and $\varphi(x)$ are rational integral functions of x, and give some of the standard types for the integrals on which the value of I may be made to depend.

Integrate $\int dx(3x^2+4)/(x^3+4x+3)$ (i.)

$\int dx\, x/(1+x^2)^3$ (ii.)

$\int dx/(1+x^2)^2$ (iii.)

12. If y be a function of x, and $x = \varphi(\vartheta)$, find the value of dy/dx, and d^2y/dx^2 as functions of ϑ, and the differential co-efficients of y with respect to ϑ.

Find what the equation

$$d\vartheta(m - n\cos\varphi)^3 - d\varphi(m - n\cos\vartheta)^3 = 0$$

becomes, as a relation in x and y, when $\cos(\vartheta+\varphi)/2 = x$, $\cos\frac{\vartheta-\varphi}{2} = y$.

13. If α and β are two roots of the equation $f(x) = 0$ connected by the relation $\alpha = \varphi(\beta)$, shew that, provided certain conditions be satisfied, the solution of the original equation may be made to depend on the solutions of equations of lower degree.

Find the roots of the equation $2x^3 + 5x^2 + 5x + 3 = 0$ being given that one of the roots is the square of another.

14. Shew that all radii vectores cut the curve $r = ae^{k\theta}$ (polar co-ordinates) at the same angle.

Find the area traced out by the radius vector in one revolution from the position $\theta = 0$, and the length of the corresponding part of the curve.

Public Health.

LABORATORY WORK.

MONDAY, *23rd March* 1896.—10 *to* 12 *o'clock.*

1. As Medical Officer of Health your attention is directed to an epidemic of sore throat—what steps would you take to determine, bacteriologically, whether it is Diphtheria or not?

2. What is meant by the terms Relative and Absolute Humidity of the Atmosphere? By what methods is the latter determined?

3. Describe the Pasteur-Chamberland Water-Filter.

PRACTICAL WORK.

The following are examples of what have been given at the Examinations:—

(*This part of the Examination lasts four days.*)

1. Quantitative determination of—
   (1) Carbonic Acid, and
   (2) Ammonia in the Atmosphere.

2. Bacteriological examination of Soil, and making culture media.

3. Analysis of, and report on, a sample of potable water.

Each Candidate must recognise Bacteriological Cultures by means of Cultivation, Staining, and Microscopical Examination.

PHYSICS.

MONDAY, *23rd March* 1896.—1 *to* 3 *o'clock.*

(*Six Questions at most to be answered.*)

1. Explain how force is measured (1) in gravitation units, (2) in absolute units. What are the causes which produce variation in the gravitation unit?

2. Explain how to measure (1) the compressibility, (2) the rigidity of an isotropic elastic substance, and explain generally their relation to the propagation of wave disturbance in the substance.

3. What is meant in the theory of capillarity by "the angle of contact"? Assuming it to be obtuse for any given liquid and solid exposed to air, explain the behaviour of the liquid in a capillary tube of the given solid.

4. Give the laws of reflection and refraction of light. Draw a diagram to show the course of a ray to the eye from a point of an object seen (1) after reflection in two plane mirrors inclined at an angle to one another, (2) after refraction through a double convex lens used as a magnifier.

5. Define the unit of heat, and explain its relation to the mechanical unit.

How many units of heat would be required (1) to evaporate 10 lbs. of a liquid whose latent heat is 50, (2) to supply for 5 hours an engine of 20 h.p. and efficiency $\frac{1}{3}$.

6. Explain the terms "phase," "amplitude," and "period" in relation to wave-motion, and illustrate by reference to the phenomena known as "Newton's Rings."

7. Draw diagrams showing the formation of nodes and loops in an organ pipe. Why is there a difference in the quality of the notes produced by an open and a closed pipe?

8. Describe the Leyden Jar.

If a charged jar and an uncharged jar are connected by joining their interior coatings and also their exterior coatings, show that there is a loss of energy, and account for it.

9. Give Ohm's and Joule's Law in Current Electricity.

In one of two conductors a current of 2 amperes generates 5 units of heat per second; and in the second, 4 amperes generates 10 units of heat per second. What is the ratio of the resistance of the two conductors?

FINAL SCIENCE EXAMINATION.

Pure Science.

MATHEMATICS.

NATURAL PHILOSOPHY.

The papers in Mathematics and Natural Philosophy are the same as for the Degree of M.A. with Honours in Mathematics and Natural Philosophy.

EXPERIMENTAL PHYSICS.

WEDNESDAY, *1st April* 1896.—9 *to* 12 *o'clock.*

(*Eight Questions at most to be answered.*)

A. Point out which of the following experimental data can be obtained by direct measurement, describing the details of one method for the purpose. In the cases where direct measurement is impossible, show what connected quantities have to be determined and how the required datum can be deduced from them :—

(1) The refractive index of a transparent substance for light of a given wave-length.

(2) The specific heat of a liquid.

(3) The effect of pressure on the freezing-point of water.

(4) The density of saturated steam at 120° C.

(5) The Dip.

(6) The Thermo-electric position of a metal.

(7) The Critical Temperature of Oxygen.

(8) The Specific Inductive Capacity of Vulcanite.

(9) The Thermal conductivity of marble.

(10) The rate of interdiffusion of two gases.

B. Show how to cut, and adjust—

(11) A crystal of Iceland spar so as to construct a Nicol prism.

(12) A crystal of Aragonite so as to exhibit external conical refraction.

ASTRONOMY.

FIRST PAPER.

SATURDAY, *12th October* 1895.—9 *to* 12 *o'clock.*

1. Show that the Equation of Time vanishes four times in a year. If E be the maximum separation of the mean and true places of the Sun in the Ecliptic, show that the greatest equation of time caused by the Sun's unequal motion in the Ecliptic is

$$E \cos \omega \sec^2 \delta.$$

2. What is meant by the Aberration of Light? If u and V be respectively the orbital velocity of the Earth and the velocity of light, show that approximately

$$\tan \text{Aberrn.} = \frac{u}{V} \sin \vartheta.$$

3. Describe generally the method of determining the Sun's parallax by the Transit of Venus. Distinguish carefully between the methods known as Halley's and Delisle's.

4. Distinguish between Geographical Latitude (φ) and Geometric Latitude (φ'). Show that

$$\frac{\tan \varphi'}{\tan \varphi} = \frac{b^2}{a^2}$$

where a and b represent the semi-axes of a terrestrial meridian.

SECOND PAPER.

SATURDAY, *12th October* 1895.—1 *to* 3 *o'clock.*

1. If the meridian transits of two stars, with declinations δ and δ', be observed with a Transit Instrument in Latitude φ, show that the Azimuthal Error of the Instrument is given by

$$\frac{\Delta \cos \delta \cos \delta'}{\cos \varphi \sin (\delta + \delta')}.$$

What is the meaning of Δ in this expression, what the effect of its sign?

2. Deduce expressions, conveniently arranged for logarithmic calculation, for the conversion of Celestial Longitude and Latitude, into Right Ascension and Declination. If a small error exist in the assumed obliquity, determine its effect on the computed Right Ascension and Declination.

3. In the case of a defective screw, show how the true linear motion of the micrometer can be derived from the screw readings.

4. Give a diagram showing the essential parts of a Sextant. Describe the Vernier and its divisions. Explain the method of determining the latitude by circum-meridian altitudes of the sun.

CHEMISTRY.

FIRST PAPER.

MONDAY, *22nd July* 1895.—9 *to* 12 *o'clock.*

1. How can pure Alumina be prepared from a mixture of Aluminic Hydrate and Ferric Hydrate? How could you prove that the Alumina so obtained is free from Iron?

2. Discuss the arguments for and against the existence of Hydrogen Carbonate, Hydrogen Chromate, and Ammonium Hydrate in aqueous solution.

3. Give examples of Dihydric and Trihydric Alcohols, and describe the action of Hydrochloric Acid upon them.

4. What are the conditions which determine whether ice or salt will separate when a solution of salt is cooled? What is a Cryohydrate?

5. In what respects do Phenols differ in chemical properties from Alcohols of the fatty series?

SECOND PAPER.

MONDAY, *22nd July* 1895.—1 *to* 3 *o'clock.*

(*Five Questions to be answered.*)

1. How are the higher Sulphides of Arsenic and Antimony prepared?

2. What is the action of Oxygen on Phosphuretted Hydrogen at low pressures?

3. What regularity is observed on examining the specific rotatory power of dilute aqueous solutions of the various salts of one and the same optically active base or acid? Discuss this regularity from the point of view of the dissociation theory of solution.

4. What are the general characters, as regards crystalline form, of substances which rotate the plane of polarisation, (*a*) in solution, (*b*) in the crystalline state? Give examples.

5. Describe the chief compounds of Lead which occur native.

6. A gaseous mixture containing Methane, Oxygen, Hydrogen, and Nitrogen, has to be analysed. For this purpose it is mixed with more Oxygen and exploded. The following are the data obtained :—

Volume taken, . . .	20.0 c.c.
Oxygen added, . . .	20.0 ,,
Contraction on explosion, .	22.5 ,,
CO_2 in residue, . . .	6.0 ,,
O_2 in residue, . . .	7·5 ,,

Calculate the percentage composition.

7. What is the constitution of Pyromucic Acid? Give the evidence. How is Pyromucic Acid related to Mucic Acid? How is Furfuran obtained?

8. How is Aldol prepared? Give other examples of this kind of condensation.

9. Discuss the attitude of Cavendish towards the Phlogiston theory; and in particular, his views with respect to the following :—

(*a*) The identity of "inflammable air" and phlogiston.

(*b*) The position of "Muriatic Acid" in its relation to Lavoisier's generalisation as to the chemical nature of acids.

HUMAN ANATOMY, INCLUDING ANTHROPOLOGY.

FIRST PAPER.

WEDNESDAY, 24*th July* 1895.—9 *to* 12 *o'clock.*

1. State the parts of the body in which Mucous Membranes are found. Describe the characters of the Epithelium

in the Mouth, Œsophagus, Stomach, Large Intestine and Bronchial Tubes.

2. Describe the anatomy of the Hip Joint, and explain the mechanical arrangements which keep the joint extended in the erect posture.

3. Write an account of the arrangement of the convolutions of the Frontal Lobe of the Cerebrum.

4. Explain the developmental significance of the Urachus, Eustachian Valve, Ligamentum Arteriosum and obliterated Umbilical Vein.

SECOND PAPER.

WEDNESDAY, 24*th July* 1895.—1 *to* 3 *o'clock.*

1. State the characters of the Skull to be seen in the *norma verticalis*. Explain the terms cryptozygous and phænozygous.

2. Between what points would you measure the height of the Cranium. Suppose a skull to be 178 mm. long by 134 mm. in height, how would you calculate the *vertical index?*

3. How would you measure the transverse and conjugate diameters of the pelvic brim? How do you ascertain the brim index? What do you understand by a dolichopellic and a brachypellic pelvis?

4. Define the terms platymery, platyknemic, dolichoknemic. How do you ascertain the dolichoknemic index?

5. What measurements of the parts of the body are taken in the anthropometrical system of M. Bertillon?

GEOLOGY AND MINERALOGY.

FIRST PAPER.

TUESDAY, 23*rd July* 1895.—9 *to* 12 *o'clock.*

(*Eight Questions only to be attempted.*)

1. What is the nature of an Earthquake?

2. Explain the causes of Landslips.

3. Give some account of the Felspathoids. Describe the rocks in which they occur as essential constituents.

4. Define the Hexagonal System, and describe three minerals belonging to it.

5. What are Granulitic, Pegmatitic, and Ophitic Structures?

6. How would you distinguish Rhyolite, Andesite, and Basalt from each other?

7. Draw sections to illustrate (*a*) Mountains of Accumulation, (*b*) Mountains of Elevation, and (*c*) Mountains of Circumdenudation.

8. Make a table of the Mesozoic Systems in England, and mention some fossils characteristic of each.

9. In what geological systems do we meet with the most marked evidence of former land surfaces?

10. Describe the structure and give the geological range of *Pterodactylus*, *Encrinus*, *Ceratites*.

SECOND PAPER.

TUESDAY, *23rd July* 1895.—1 *to* 3 *o'clock.*

1. Describe the Igneous rocks and the geological structure of Arthur Seat.

2. Give some account of the *Odontornithes*.

3. How do the general configuration and the geological structure of the Alps indicate the recent elevation of that chain?

4. State the arguments in favour of the doctrine of the continuity or permanence of continental and oceanic areas.

BOTANY.

FIRST PAPER.

MONDAY, *23rd March* 1896.—9 *to* 12 *o'clock.*

1. Write an historical account of the stelar theory of tissue arrangement.

2. Discuss the question of the affinities of the Uredineæ.

3. What modifications of structure are found in plants to enable them to resist drought. Illustrate your answer by examples drawn from as many natural orders as possible.

4. Write a short essay on the principles of a natural

classification, and show how you would apply them to arrange the members of the Algæ.

5. Discuss the question of the relationship of plant-movement to light.

SECOND PAPER.

MONDAY, *23rd March* 1896.—1 *to* 3 *o'clock.*

(*Illustrate your Answers by Drawings.*)

1. Write a short account of the process of Carbon-Assimilation in green plants.

2. Describe the structure of the root in a monocotyledonous plant. Show how the structure you describe is related to the functions performed by the root.

3. What is meant by Definite Inflorescence? Classify the forms of this inflorescence, and give an example of each.

4. Compare the chief stages in the life-histories of a moss and a fern.

5. Describe the fruit in Cruciferæ, Orchideæ, Gramineæ, Umbelliferæ.

PRACTICAL BOTANY.

WEDNESDAY, *25th March* 1896.—10 *to* 1 *o'clock.*

1. Make a series of sections illustrating the structure of Specimen A. Mount and leave for inspection. Write a description of the structures observed and give illustrative drawings.

2 *to* 5 *o'clock.*

2. With the aid of the Flora given you, determine the Genus and Species of Specimens B and C.

3. Refer Specimens D, E, F, and G, to their natural orders, giving your reasons.

4. Identify and briefly describe Specimens H, I, J, K, L, M, N, O, P, Q.

(*a*) *Cassiope tetragena.* (*b*) *Tussilago farfara.* (*c*) *Saxifraga oppositifolia.* (*d*) *Francisca calycina.* (*e*) *Corydalis*

nobilis. (*f*) *Astilbe Japonica.* (*g*) *Euphorbia Jacquinaeflora.* (*h*) Trichogyne of *Callithamnion plumosum.* (*i*) Section of capsule of *Capsella bursa-pastoris* showing embryoes. (*j*) Stone cells of *Pyrus.* (*k*) Section of male flower of *Juniperus communis.* (*l*) Inflorescence of *Dielytra spectabilis.* (*m*) *Nectria cinnabarina.* (*n*) *Lathrea squamaria.* (*o*) *Anthoceros laevis.* (*p*) Germinating sclerotium of *Claviceps purpurea.* (*q*) *Phallus impudicus.*

Engineering.

ENGINEERING.

MONDAY, 30*th March* 1896.—9 *to* 11 *o'clock.*

1. Explain how you would set out a circular curve for a railway—(1) with a Theodolite; (2) with chain and tape.

A curve is 20 chains radius. What is the length of the off-set from the tangent and from the chord produced for each chain length?

2. Describe how to find the Metacentre of a ship. In vessels of ordinary form, within what angle of inclination may the Metacentre be taken as a fixed point?

A cargo steamer of Rectangular section has a displacement of 5000 tons, and the Metacentre height is 3 feet. The engines are assisted by canvas which heels the vessel over 9 degrees.—What is the moment of stability?

(Sine of 9° is ·1564.)

Where is the Metacentre when the moment of stability is zero?

3. A cast-iron beam is 12 inches in depth over all. The upper flange is $1\frac{1}{2}$ inches thick and 4 inches broad, the lower flange $1\frac{1}{2}$ inches thick and 8 inches broad, thickness of web $1\frac{1}{4}$ inches. What is the distance of the neutral axis from lower edge of beam?

4. Describe the terms *clearance* and *cushioning* in a steam engine cylinder, and the benefits supposed to be derived by using a steam jacket. Also sketch an indicator diagram and mark clearly the points of admission, cut off, and opening of exhaust.

5. Design cross sections giving figured sizes of an iron plate girder for a span of 100 feet to carry 1 ton per lineal foot of girder—(*a*) Section at centre of span; (*b*) Section at 10 feet from support. Show clearly the size and number of plates you would use in the booms and the number and size of rivets.

NOTE.—*All answers should, as far as possible, be illustrated by sketches or diagrams.*

MONDAY, *30th March* 1896.—3 *to* 5 *o'clock.*

1. (*a*) What is meant by parallax in a theodolite, and how is it corrected?

(*b*). How is the line of Collimation adjusted?

2. A Steam Boiler is 15 feet long and 5 feet diameter, having a pressure of 120 lbs. per square inch. Thickness of plate 1 inch. State the stress on the shell longitudinally and transversely. If the longitudinal seam instead of being parallel were made at 45° to the axis, would it tend to increase or decrease the stress on the seam, and in what proportion?

Give a good reason for making the seam parallel with the axis.

3. What should be the pitch of the rivets that will give the strongest double-riveted lap joint for a boiler made of plates 1 inch thick, and what is the efficiency compared with the strength of the material?

$$(d = 1{\cdot}2\sqrt{z.})$$

4. It is desired to guage the quantity of water flowing in a stream by putting a weir across it. What is the greatest width the notch in the weir should be, compared with the width of the stream? Why is it desirable to obtain still water above the weir, and that the tail water should have a free overfall?

The notch in a weir is 5 feet wide; the still water is 10 inches above the knife edge.—What is the quantity of water flowing over it?

5. An open rectangular flume conveys water which it is proposed to carry across a valley through an inverted syphon 1000 feet long and 12 inches diameter. The flume is 3 feet wide and the water 2 feet deep; average velocity is 6 inches per second.

What must be the difference of level between the ends of the inverted syphon pipe?

NOTE.—*All answers should, as far as possible, be illustrated by sketches or diagrams.*

TUESDAY, 31*st March* 1896.—9 *to* 11 *o'clock.*

1. State, and indicate the proof of, the Prismoidal Formula, as applied to the calculation of the cubic contents of earthwork. Are there any cases in which the use of the method of mean areas is to be preferred?

2. In a braced girder, a horizontal pin is held in equilibrium by five bars, radiating from it at equal angles in a vertical plane, and, taken in order, are numbered (1), (2), (3), (4), (5) respectively. The stress on (1) is a tension of 5, that on (3) a tension of 3, and that on (4) a tension of 2. Construct the polygon of forces for the pin, and determine the nature and amount of the stresses in the remaining bars (2) and (5).

3. Describe the action of (*a*) the Poncelet, (*b*) the Pelton water-wheel, and state how, in each case, the maximum theoretical efficiency may be found. Under what conditions, as regards water supply, would you recommend the use of one or other of these machines?

4. The walls of a building are 18″ thick and 50 ft. apart. The roof, which is carried on wrought iron trusses, spaced 10 ft. apart, is loaded, vertically, with 16 lbs. per foot of the area covered, and normally, with a wind pressure of 20 lbs. per foot on the left side of the roof surface.

Choose a suitable form of truss for the conditions stated, and determine the nature and amount of the stress in each of its members. Design, also, as many of the structural details as you are able.

5. Using the subjoined data, and assuming the steam ports to be $2\frac{1}{2}''$ wide, determine, by means of a Zeuner diagram, the angle of advance of the eccentric, and the maximum openings for admission and exhaust.—Travel of slide valve, $5\frac{1}{4}''$; outside lap, $1\frac{1}{2}''$; inside lap, $\frac{1}{4}''$; lead, $\frac{3}{16}''$; cut off, $\frac{5}{8}$ of stroke.

NOTE.—*All answers should, as far as possible, be illustrated by sketches or diagrams.*

WEDNESDAY, *1st April* 1896.—9 *to* 11 *o'clock.*

1. Compare the Sextant and the Theodolite as surveying instruments, and describe the permanent adjustments of each.

2. Three shear-legs, each 15 ft. long, support from their apex a load of 2 tons. Their feet, which rest on level ground, are coincident with the angles of a triangle, the sides of which, taken in order, are 10 ft., 12 ft., and 14 ft. respectively. Determine the stress in each of the legs.

3. Supposing you were supplied with a bar of good Yorkshire iron, describe minutely how you would proceed to test it so as to determine (*a*) the tensile stress at the yield point; (*b*) the stress and elongation at maximum load; (*c*) the contraction of area at fracture; and state approximately what you would expect the result to be in each case.

4. State fully the consideration that would guide you in deciding between a River and a Catchment-basin as the source of a town's water supply, and mention the structural works that would, in a general way, be necessary to render each source available. What is a "hydraulic gradient," and what has it to do with the size and arrangement of a system of water mains?

5. In a jacketed cylinder, dry saturated steam expands from an absolute pressure of 120 lbs. per square inch, and 348° F. temperature, to an absolute pressure of 30 lbs. per square inch, and 250° F. Assuming the steam to be dry at the end of the stroke, and the expansion curve a rectangular

hyperbola, calculate the quantity of heat supplied per pound of steam, during the forward stroke. (Hypo log 4 = 1.384 ; one pound dry steam at 250° F. = 13.5 cubic feet.)

NOTE.—*All answers should, as far as possible, be illustrated by sketches or diagrams.*

DRAWING.

THURSDAY, *2nd April* 1896.—9 *to* 12 *o'clock.*

I.—PLANE GEOMETRY.

1. Construct a triangle *ABC*, whose perimeter is $15\frac{3}{4}$ inches ; altitude, $3\frac{3}{16}$ inches ; base, *AB*, $6\frac{1}{4}$ inches. A point *O*, within the triangle, is distant $3\frac{3}{8}$ inches from *A* and $3\frac{3}{4}$ inches from *B*. Divide the triangle into 5 equal parts by lines drawn from the point *O*.

2. The diameters of two spur wheels are 24 inches and 36 inches ; the pitch is $2\frac{1}{2}$ inches, and the teeth are cycloidal with radial flanks.

Draw a pair of teeth in contact, of such a length that two pairs of teeth may always be in contact. Mark the path of contact and the arcs of contact.

3. Given the proportions of the Roberts parallel motion. (*See sketch.*) Links *AC* and *BD* are of equal length, and swing about centres *A* and *B*. Find the path of the point *P* which is rigidly attached at distance *CP* = *DP* = *AC*, from centres *C* and *D*, to the coupler *CD*.

II.—SOLID GEOMETRY.

1. An indefinite line, inclined to the horizontal plane at 40°, is the intersection of two planes, one inclined at 53°, the other at 60°. Show them by their traces.

2. Given the plan of two pyramids which penetrate, the bases of both being on the horizontal plane. (*See sketch.*) Determine the lines of interpenetration.

3. Make an Isometric projection of a hexagonal nut for a $1\frac{1}{2}$-inch bolt. The nut is to be of the usual proportions and design, and the top is to be seen as it rests on one of its flat sides.

THURSDAY, *2nd April* 1896.—2 *to* 5 *o'clock.*

From one or other of the figured sketches supplied—

(1) Regulator Valve for a Locomotive Engine ;

(2) Railway Bridge :—

make the detailed drawings indicated.

DYNAMICS.

TUESDAY, 31*st March* 1896.—2 *to* 5 *o'clock.*

1. Two equal triangles so move in a plane that the *relative* motions of corresponding corners are equal simple harmonic motions, in parallel lines but with phases differing by constant angles. How do the triangles, themselves, move?

2. Investigate the form of path of a projectile at the earth's surface, neglecting the resistance of the air. What is the least velocity of projection which will enable a ball just to clear a wall 20 feet high at a distance of 30 yards?

3. A wheel of mass 40 lbs., and radius of gyration 4 feet, is set in motion by the descent of a 2-lb. mass attached to the end of a flexible cord which is coiled round the 6-inch axle. The cord slips off when wholly uncoiled : and the wheel, which is then found to be rotating with unit angular velocity, comes to rest in 3 minutes. Calculate the resistance couple assumed constant throughout, and the length of the cord originally coiled on the axle.

4. Give approximate limits for the time of impact, in terms of relative speed and total linear distortion. If a half-pound hammer, moving at 10 feet per second, remains for $\frac{1}{10,000}$ second in contact with a nail, what is the average force exerted?

5. Investigate the form of the catenary of the ordinary suspension bridge, the roadway being distributed uniformly along the horizontal.

6. What are the conditions of equilibrium of a rigid body. Show how energy considerations enable us to discriminate between the nature of the equilibrium, whether stable, neutral, or unstable.

7. An A-formed combination of two equal uniform rods, freely jointed above and with their middle points connected by a light elastic string whose unstretched length is half the length of each rod, rests with the lower ends on a smooth horizontal table. Find the position of equilibrium, the elastic string being such as to be doubled in length under a load equal to the combined weight of the rods.

8. Two opposite corners of a jointed quadrilateral are pressed towards one another by a given stress. Find the consequent tension of a cord which connects the alternate corners.

9. Find the equation of motion and the velocity of propagation of a longitudinal disturbance along a rod of small compressibility.

10. Establish the relations between the components of stress and the given components of strain in an isotropic elastic body. Thence deduce expressions for Young's Modulus and Poisson's Ratio in terms of the rigidity and compressibility.

11. Discuss the problem of the simple torsion of a pillar, or the simple flexure of a beam, pointing out the conditions under which the assumptions usually made hold true.

12. Show how to form the equations for the catenary when the string, uniform when unstrained, follows Hooke's Law under tension.

GEOLOGY.

TUESDAY, 24*th March* 1896.—1 *to* 3 *o'clock.*

1. Give some account of the mechanical and chemical action of the atmosphere.

2. Give the mineralogical characters of Orthoclase, Hornblende, Barytes, Limonite, Marcasite, and Apatite.

3. Give the megascopic and microscopic characters of Dolerite, Rhyolite, Granite, Marble, Serpentine, and Quartzite. Describe the mode of occurrence and origin of each.

4. What are the characters upon which the strength and durability of building-stones depend?

5. Distinguish between Lamination, Foliation, and Slaty Cleavage.

6. Draw *one* section to illustrate the following structures :— Anticline, Syncline, Unconformity, Outlier, Inlier, Dyke, and Fault.

7. In selecting the site for a Reservoir, what are the chief geological considerations to be kept in view?

Public Health.

MEDICINE.

MONDAY, *23rd March* 1896.—10 *to* 12 *o'clock.*

(*Two Questions only to be answered.*)

1. Discuss the subject of the communicability of Typhoid Fever. Mention any methods of treatment which aim at counteracting the disease-poison in the individual.

2. State the views now entertained as to the nature and pathology of Malarial Fevers.

3. Mention the more important morbid conditions affecting the digestive and circulatory systems which result from Chronic Alcoholism.

SANITARY LAW.

MONDAY, *23rd March* 1896.—1 *to* 3 *o'clock.*

I.—*Infectious Disease* (*Prevention*) *Act*, 1890.

Give a brief summary of the Provisions of the Infectious Disease (Prevention) Act, 1890.

II.—*Bye-laws and Regulations.*

Enumerate the various matters with respect to which a Sanitary Authority may make bye-laws and regulations.

State in regard to each subject-matter to be regulated—

(*a*) The General Act or Order under which powers are given to this end.

(*b*) The person or persons upon whom the duty of inspection devolves.

III.—*Housing of the Working Classes.*

What are the powers of local authorities for dealing with

"unhealthy areas," "unhealthy dwelling-houses," and with "obstructive buildings" respectively? Give an outline of the procedure to be followed in each case.

VITAL STATISTICS.

MONDAY, *23rd March* 1896.—4 *to* 6 *o'clock.*

1. What do you understand by the terms, (*a*) death-rate, (*b*) birth-rate, (*c*) infant death-rate, (*d*) zymotic death-rate, (*e*) mean duration of life, (*f*) probable duration of life, and (*g*) expectation of life?

In what way are these to be used as indices of the health of a community?

2. A parish with 1250 inhabitants has a mean annual mortality of 15.3 per thousand persons living. In course of time a large school is built, and is occupied by 350 scholars from 10 to 15 years of age and a sufficient staff of masters and servants. A workhouse is also erected for 400 inmates and staff, half of the inmates being above 50 years of age.

Assuming the original population to be stationary as regards numbers and mortality, state, approximately, the effect which the existence of the school and the workhouse is likely to have upon the death-rate.

3. What results would you anticipate from the compulsory notification of Scarlet Fever (*a*) as regards the proportion of attacks to population, and (*b*) as regards the proportion of deaths to attacks? State your reasons, and show how far they would be modified by the presence or absence of means of hospital isolation.

PRACTICAL SANITATION.

TUESDAY, *24th March* 1896.—10 *to* 12 *o'clock.*

During the second quarter of 1890 there was a general prevalence of sickness in the agricultural village of X. In a considerable number of cases, especially in children, the attack was of a mild and indefinite type, marked in some instances by vomiting and diarrhœa, and in others merely by pallor, headache, and feverishness. With regard to these

slighter attacks no complete records were kept, but amongst children they were sufficiently numerous to materially affect the attendance at school, and many of the scholars who continued to attend were observed to be pale and languid and to suffer from headache, and were in consequence excused lessons. Cases of this type ended in recovery after a few days' illness. There was no appearance of localisation in any particular part of the village.

At the same time there were, however, a number of cases of illness of different and very fatal type, with regard to which fuller details can be given. They occurred for the most part in houses situate at the higher or southern end of the village, and especially in those situate on the eastern side of the main street. The invasion was generally sudden, often at night, with usually rigor and vomiting, and sometimes diarrhœa, pain in chest or region of liver, or headache, and a feeling of faintness and prostration, and sometimes drowsiness. The temperature rose rapidly, often reaching 104° F. on the first or second day of illness; its subsequent course was, however, very irregular, it being not unfrequently higher in the morning than in the evening. Respiration and pulse were accelerated, but the normal ratio of 1 : 4 was rarely departed from. Headache was often present, and in some cases there was delirium of a noisy and busy character. Epistaxis, vomiting and diarrhœa, were common symptoms. No rash was observed in any case. In nearly all the more severe cases there was evidence, after some days, of more or less consolidation of portions of lung, and in many cases pleuritic friction sounds were heard, but the gravest constitutional symptoms were often found associated with comparatively limited extent of pulmonary mischief. Physical examination of the abdomen gave negative results.

The course of the disease was short, generally under a week in fatal cases. In one or two cases a relapse occurred. Some of the non-fatal cases recovered slowly, but in others there was a sudden improvement, with fall of temperature, at the end of the first or beginning of the second week.

Out of 29 cases of the severe type, 18 ended fatally; among males there were 18 attacks with 12 deaths, and among females 11 attacks with 6 deaths. As regards age the distribution was as follows:—

	Attacks.	Deaths.
Under 30 years of age, .	3	—
Aged 30 to 60 years, .	14	8
Aged 60 years and upwards,	12	10

These 29 attacks were distributed over a period of three months, as shown below:—

Week ending April 12, .	4	Week ending May 31, .	1
,, ,, ,, 19, .	1	,, ,, June 7, .	1
,, ,, ,, 26, .	7	,, ,, ,, 14, .	1
,, ,, May 3, .	4	,, ,, ,, 21, .	1
,, ,, ,, 10, .	2	,, ,, ,, 28, .	1
,, ,, ,, 17, .	1	,, ,, July 5, .	3
,, ,, ,, 24, .	2		

These 29 cases occurred in 28 households, in only one household did two cases of the severer form of disease occur. In a considerable number of households, however, cases of the slighter and more indefinite form of illness already referred to, occurred concurrently with the severer disease. There were, however, certain series of severe cases, in which it was thought that infection from case to case was probable, for example:—A man, A, the first victim, was taken ill on April 6th and died on April 10th. He was attended by a woman, B, who laid him out after his death; she was attacked on April 11th. B's next door neighbour, C, saw her on April 11th, and was herself attacked on April 12th, and lastly, another woman, D, who attended C on April 12th, was seized by the disease on April 13th.

A second series began with a man, E, who went to A's house on April 12th for the first time, to assist at the funeral; he was attacked on April 13th. E's mother-in-law, F, who lived at the other end of the village, came to see E during his illness; she sickened on April 23rd, and died three days afterwards. A neighbour, G, who attended F and washed

her clothes after the funeral, was attacked on May 12th and died on May 17th.

The village of X has a population of about 800 persons, and is situate on porous gravelly soil. Most of the houses are ranged on either side of the main street, which curves round from the south to the west, the southern end of the village being the higher. The houses have, with few exceptions, plenty of open space at the back. There are a few old cottages, of which the bedrooms are of cramped dimensions and ill-ventilated. The water supply is, in all cases, obtained from shallow wells, and at the western or lower part these are only two or three feet deep. The southern portion of the village is sewered by means of a pipe sewer laid on the eastern side of the main street, which receives all house slops and farm-yard drainage, in addition to storm water, and discharges with a good fall into an adjoining brook. At the other end are two roadside pipe-sewers, leading indirectly to the same water course, but with less fall; these sewers do not receive much house drainage, most of the houses in this part being drained separately, or in groups of two or three to independent outfalls. No special means of flushing or of ventilation have been provided for any of the sewers; but the roadside gullies for the reception of storm water are untrapped. The house drains throughout the village are of very rough construction, the inlets being untrapped and the drains themselves constructed of bricks or of agricultural pipes. There are, however, no indoor sinks or gullies, nor any water-closets, except at one house at the head of the southern sewer. The closet accommodation in general consists of privies with open ash-pits, and in some instances are a source of nuisance, but as a rule the privies are not situate very close to dwellings. Up to the time of the outbreak there were many nuisances to be found in all parts of the village, due not only to defects of drainage and privies, but also to offensive accumulations of various kinds near houses. Not infrequently these accumulations were within a few feet of the wells. Although the whole village was in an unsatisfactory condition, it was thought

that, on the whole, the greatest incidence of disease was upon the most insanitary dwellings.

Milk was obtained from many different sources, and several of the patients had not been in the habit of using milk prior to their illness.

The rainfall had been exceptionally small for several weeks prior to the outbreak.

The records shew that, in addition to occasional prevalence of scarlatina, measles, and whooping cough, cases of enteric fever occur in the village almost every year, and that this disease was epidemic in 1858 and in 1868. Erysipelas also is often prevalent, and was epidemic in 1885. Influenza became epidemic in January 1890, but had apparently disappeared from the district before the commencement of the outbreak under review. The latter appeared to attack indifferently those who had had influenza and those who had not.

The village of X is situate in a Rural District in which the Infectious Disease (Notification) Act, 1889, was not in force, and where also there was no hospital for the isolation of cases of infectious sickness.

Comment upon the circumstances of this outbreak, and explain fully the view which you take as to its nature, origin, and mode of diffusion. Compare it with other recorded outbreaks of similar kind. What further evidence would you seek to obtain, and by what means? What assistance would you expect from chemical and bacteriological investigations? State concisely the measures which you would advise the Sanitary Authority to adopt with regard to the village of X. In regard to each recommendation, state the Act or Acts of Parliament which confer the necessary power on the Sanitary Authority to enable them to carry it out. In the event of default on the part of the Sanitary Authority, under what conditions, and by whom, can they be compelled to take action?

PRACTICAL SANITATION, MENSURATION, AND DRAWING.

TUESDAY, 24*th March* 1896.—1 *to* 4 *o'clock.*

(*Four Questions only are to be attempted, of which No.* 5 *must be one.*)

1. State what conditions, as regards site and environment, are necessary to ensure the healthiness of a dwelling; and mention, incidentally, such steps as may be usefully taken to remedy the commoner defects met with.

2. With the aid of sketches, describe and dimension the transverse and longitudinal sections of a Filter-bed, as commonly used in connection with a town's water-supply. State what you know as regards the rate of filtration, and the general management of such filters. Describe, also, a Gauging-House, and how it is used.

3. You are asked to give an opinion as regards the character of the design, material, and execution (*a*) of the plumbing-work in a large house; (*b*) of an aqueduct employed in conveying water between a Storage and a Service Reservoir, and in the construction of which brick-work and C.I. pipes are chiefly used. State the main considerations that would guide you in drawing up your report in each case.

4 Explain fully the various causes which render the ventilation of sewers necessary, and state how such ventilation is best effected. Illustrate, also, by means of an example, the mode of calculating the effective power of a ventilating shaft.

5. From the dimensioned sketch supplied (a Disconnecting Trap), make the drawings indicated.

NOTE.—*All answers should, as far as possible, be illustrated by sketches or diagrams.*

Agriculture.

AGRICULTURE.

WEDNESDAY, 25*th March* 1896.—9 *to* 12 *o'clock.*

1. In entering on a tillage farm at Whitsunday, what would the "Incoming" tenant be required to do as regards (*a*) sowing the grass seeds, (*b*) sowing or taking over the cereal crop, (*c*) taking over the farm-yard manure, and (*d*) ploughing the land—cleaned land, fallow, and lea?

2. Assuming that you require a farm with the object of pursuing the practice of growing cereals, including barley, and of fattening cattle and sheep, indicate the conditions of soil, situation, and climate that would influence you in your selection. What other circumstances besides these would you give attention to?

3. Discuss the advantages and disadvantages of the more important motive powers in use on a farm, for driving a thrashing mill and other machinery. Give the approximate prices of a four-horse-power thrashing mill, a hand cake-breaker, and a hand turnip-cutter.

4. State the preliminary course of cropping, and the immediate preparation that you would recommend, in the case of a strong clay field that you intended to lay out to permanent pasture. What mixture of seeds would suit such a field, and how would you propose to treat the pasture in subsequent years?

5. Sketch what you consider a suitable arrangement as regards the position of the barn, turnip houses, cake house, dung-hill, stable and byres in a farm steading. Give suitable dimensions for (*a*) a double cow byre, (*b*) a feeding box, (*c*) a straw barn, (*d*) a corn barn, (*e*) a turnip house, (*f*) a cake house, (*g*) a stable.

6. What size of farm, at a rent of 20s. per acre, two thirds tillage, would you consider suitable for a dairy of 30 cows, where the heifer calves are reared? Sketch the system of farming that you would propose to adopt, and give details regarding the rearing of the young stock.

7. In valuing unexhausted manures for compensation under the Agricultural Holdings Act, what scale would you suggest for Lime, Dissolved Bones, Bone Meal, Kainit, and Sulphate of Ammonia? In fixing the value of the unexhausted residue, what circumstances would modify your award?

8. Give a list of the implements and machines necessary on a tillage farm of 200 acres, noting the price and daily output of work of each.

AGRICULTURAL CHEMISTRY.

WEDNESDAY, 25*th March* 1896.—1 *to* 3 *o'clock.*

1. How may the amount of organic matter in a soil be determined?

How does the knowledge of the amount of organic matter in a soil serve as a guide to its physical and also its manurial treatment?

2. What are the sources from which soils obtain their nitrogenous matter? What are the conditions which favour the formation of nitrates in a soil?

3. What is the composition of Asparagine? In what parts of plants does it chiefly abound? What are its functions in the growth of plants? How may it be distinguished from Albumen?

What is its value as a fodder?

4. If a soil be infertile, what means would you adopt to determine the cause or causes, and what remedial treatment would you recommend in (*a*) infertility for crops in general, (*b*) infertility for the Leguminosæ only?

5. The Carbo-hydrates and Oils in feeding stuffs are generally classified as "heat producers." Compare the relative values of the two; give reasons for your opinions, and state how the changes you suggest are effected.

6. What are the Chemical results of tillage? State the chief agency at work in the changes you suggest, and give an approximate estimate of their amount.

GEOLOGY.

TUESDAY, 24th *March* 1896.—1 *to* 3 *o'clock.*

1. Describe the Geological action of plants and animals, under the heads of (*a*) Destructive; (*b*) Protective; and (*c*) Reproductive Action.

2. Give the characters of the essential mineral constituents of Basalt, Rhyolite, and Syenite.

3. Describe two examples of each of the following kinds of rock: — Sedimentary; Holocrystalline; Chemically-formed; Metamorphic.

4. Give some account of the jointed structure of (*a*) bedded rocks, and (*b*) massive crystalline rocks.

5. Define the following terms:—Monoclinal Fold; Fan-shaped structure; Inversion; Slaty cleavage—and illustrate with diagrams.

6. Distinguish between Sedentary or Disintegration Soils and Transported or Travelled Soils.

VETERINARY HYGIENE.

MONDAY, 23*rd March* 1896.—1 *to* 3 *o'clock.*

1. Name the hereditary causes of lameness in horses.

2. How is Influenza of the horse recognised, and what are the *general* principles to be adopted for its prevention and cure?

3. What is the Tuberculin test? Is it of value, and how is it applied?

4. Describe a case of Milk Fever in the cow, and state what means should be adopted for its prevention and cure.

5. What cubic space should be allowed per horse in a stable, and also a cow in a byre?

6. State quantities and varieties of food which a cart-horse should receive per week in this country.

AGRICULTURAL ENTOMOLOGY.

THURSDAY, 2*nd April* 1896.—9 *to* 11 *o'clock.*

1. State the main characteristics of development and life history of the Gad-flies (*Tabanidæ*), Forest or Spider Flies

(*Hippoboscidæ*), and Warble or Bot Flies (*Œstridæ*); and describe the life history and means of prevention of one of the following kinds :—

Great Ox Gad Fly, *Tabanus bovinus.*

Ox Warble Fly, *Hypoderma bovis.*

Forest Fly, *Hippobosca equina.*

Sheep Spider Fly, *Melophagus ovinus* (popularly known as "Sheep Tick").

2. What do you understand by a typical lepidopterous larva? Name several lepidopterous larvæ which do not conform to the normal type, and explain in what points they severally differ therefrom. How do the larvæ of Lepidoptera usually differ from those of (*a*) Diptera, (*b*) Coleoptera, (*c*) Tenthredinidæ?

3. Give the popular and scientific names of four or more of the moths, weevils, or other beetles which are seriously destructive to stored or to imported grain, or to flour in mills, with the life history and available means of lessening the amount of injury of one or more kinds.

4. Write a brief account of the Wireworm,—its general structure, life history, and classification. By what signs would you detect its ravages, and what methods of prevention or remedy would you recommend?

5. Name the stage of existence (as egg, larva, &c.), and the localities, in which some of the commonly destructive crop and orchard pests, as Turnip Flea Beetle, "Surface Caterpillars," Crane Fly or Daddy Long-legs, Winter Moths, Codlin Moths, Saw-flies, or other injurious infestations usually pass the winter; and the nature of the different methods of treatment which are consequently required.

6. Enumerate five common insect pests of cruciferous crops (Turnip, Cabbage, &c.). In a second column write their systematic names, and in a third column the natural orders to which they severally belong. Name also a few weeds which are capable of supporting these pests.

FORESTRY.

THURSDAY, *2nd April* 1896.—11.30 *to* 1.30 *o'clock.*

(*Five Questions only to be answered.*)

1. Explain fully the advantages that attach to the cultivation of mixed woods, and criticise the mixture of the Scotch Pine, Larch, and Spruce on deep, rich soil.

2. Show how the destructive effects of gales on woods in this country may be materially modified by attention to sylvicultural details. Assuming that you had to fell 10 acres annually of a pure mature pine wood of 100 acres—with simultaneous artificial regeneration—indicate your method of procedure.

3. Give an account of the management of Oak coppice, including its utilization. Be careful to note the length of the rotation under varying conditions of soil and climate, the manner and season of felling, and the yield of wood and bark.

4. How do you account for the formation of annual rings in timber? What are the chief characteristics of coniferous wood? How might you distinguish a piece of silver fir from a piece of spruce?

5. What is the object of a Working Plan? When may the standing stock be said to be "normally" constituted? And what are the advantages of its being so?

6. How does the presence of considerable forest areas tend to affect—

Temperature of air;
Formation of dew;
Evaporation of moisture;
Supply to wells, springs, and streams?

ECONOMICS.

WEDNESDAY, *1st April* 1896.—11.30 *to* 1.30 *o'clock.*

(*Answer* SEVEN *Questions only.*)

1. Explain the effect upon rents of modern facilities of transport.

2. State the advantages and disadvantages of peasant proprietorship from the economic point of view.

3. Discuss the relation between rent and the interest on capital expended on improvements.

4. Define economic wealth. What constituent elements of wealth are prominent in the different departments of the science?

5. Mention some of the more important characteristics affecting the efficiency of the individual labourer.

6. Explain the law of diminishing return as applied to the production of corn. By what means may its effects be counteracted?

7. Describe generally the forces which determine the wages of agricultural labourers in any particular locality, distinguishing between real and nominal wages.

8. Indicate briefly the probable economic results of a simplification of the modes of transferring property in land.

9. What are the principal advantages and disadvantages of long leases? In what cases (if any) and with what limitations should compensation for agricultural improvements be compulsory?

(A.)—ENGINEERING FIELD-WORK.
(B.)—ENGINEERING.

WEDNESDAY, 1*st April* 1896.—9 *to* 12 *o'clock.*

(*New Regulation Candidates are required to answer the Questions in Group A only. Old Regulation Candidates are required to answer Three Questions only in Group A, as well as those in Group B.*

(A).

1. State what units of measurement are used in surveying operations, and explain why each is adopted.

2. In chaining a line, an obstacle is met with which can only be seen across. Give two methods by means of which the intervening distance can be ascertained.

3. What is Traversing? Show how the correctness of the work of a closed traverse may be checked without plotting it.

4. How would you test the permanent adjustments of a Transit-Theodolite, and, if found to be faulty, correct them?

5. Explain how a Circumferenter Survey is plotted by means of rectangular co-ordinates, and state what advantages this method possesses over other methods in use. Illustrate your answer by an example.

6. Explain the use of "bench marks" in levelling operations, and exhibit two methods of reducing the entries usually made in a levelling field-book.

(B).

1. If a system of forces acting on a body keep it at rest, what relationship will exist between the lines which may be taken to represent the forces in question?

2. Find the maximum bending moment in a beam, 14 feet long, if it be supported at both ends and loaded in the middle with a weight of 1 ton.

3. Two pieces having a constant velocity ratio, are connected by toothed gearing. What relationship must there be between the velocity ratio and the number of teeth on the pieces?

4. Point out the relative advantages of rectangular and triangular notches in the gauging of streams.

What quantity of water per hour will flow through a rectangular notch 2 feet wide, when the surface of the water in the still pond is 8 inches above the crest of the notch?

5. What is meant by the maximum efficiency of a steam engine? Having given the initial and final pressures of the steam in any case, how would you express it?

6. What is the use of a fly-wheel? According to what law does the effort imparted by a steam-engine to a fly-wheel vary, and how may the curve of velocity be found from the curve of effort?

7. How are water-wheels classified? Describe Poncelet's wheel, and state what advantages it possesses over those having radial floats.

NOTE.—*All answers should, as far as possible, be illustrated by sketches or diagrams.*

Degrees in Science.

DOCTORS OF SCIENCE.

The names of the Doctors of Science previously to 1889, will be found in the Historical Appendix to List of Graduates published in 1889, pp. 132-134. The following are the names of the Doctors from 1889 to 1896, both years included :—

In Mental Science.

1891. William Mitchell, M.A.
,, Robt. Mark Wenley, M.A.
1892. Chas. Mackinnon Douglas, M.A.
,, Jas. Lewis M'Intyre, B.A.
1893. William Ingram, M.A.
1893. Purnananda Chatterji.
1894. William Caldwell, M.A.
1895. John Gunn, M.A.
,, Sydney Herbert Mellone, B.A.

In Philology.

1893. Harry Angus Alexander Kennedy, M.A.
1894. George Barnet Gardiner, M.A.

In Pure Science.

1889. Thomas Rhymer Marshall (Chemistry).
1890. Alex. Crichton Mitchell.
,, Hugh Marshall.
1891. William Cossar Mackenzie.
,, Thomas Smith Murray.
1892. Jacques François Marais, B.A. (Chemistry).
1893. John Shields (Chemistry).
1894. Malcolm Laurie, B.Sc.
,, Charles Hunter Stewart, M.B., C.M., B.Sc.
1895. Arthur Pillans Laurie, B.Sc.

In Public Health.

1890. James Anderson, M.D.
,, James Andrew Blair, M.B.
,, William John Brock, M.B.
,, John Stevenson, M.B.
1892. Charles Henry Bedford, M.D.
,, Robt. Wm. Dickinson Mac-Martin Cameron, M.D.
,, Alex. C. Houston, M.B., C.M.
,, William George Aitchison Robertson, M.D.
1893. Edward Henry Ezard, M.D.
,, John Howard-Jones, M.B.
,, John Fred. Joseph Sykes, M.B.
,, James Buchanan Young, M.B.
1894. Henry Halcro Johnston, M.D.
,, John Macmillan, M.A., M.B., C.M.
,, Charles Templeman, M.D.

Degrees Conferred in 1895-96.

THE DEGREE OF DOCTOR OF SCIENCE.

In Chemistry.

1st August 1895.

In the Department of Chemistry.

Arthur Pillans Laurie, B.Sc. *Thesis*—"The Constitution of Alloys."

THE DEGREE OF BACHELOR OF SCIENCE.

In Pure Science.

1st August 1895.

James Alex. Macdonald, M.A.
*Albert Edward Mettam.
Thomas William Pickles, M.A.
William Dickson Ritchie, M.A.
John Rees Roberts.

* *Passed with Distinction.*

11th April 1896.

John Angus Macdonald, M.A.
†Jessie Chrystal Macmillan.
Alexander Durie Russell.
Longfield Smith.
William White Taylor, M.A.

† *Passed with Distinction in Mathematics and Natural Philosophy.*

In Engineering.

11th April 1896.

James Hay.

In Public Health.

1st August 1895.

John Wardle Bone, M.B.
George Matheson Cullen, M.D.
James Taylor Grant, M.D.
Edmund Thomas Whitaker, M.B.

11th April 1896.

William Morrison, M.B., C.M., B.Sc.
George Williamson Park, M.B., C.M.
George Taylor, M.B., C.M.
George Pratt Yule, M.B., C.M.
William Burney Bannerman, M.D.
George Herbert Cock, M.B., C.M.

In Agriculture.

1st August 1895.

Sidney Unwin.

11th April 1896.

Arthur Allsebrooke.
Frank Parker Walker.

Fellowships, Scholarships, Bursaries, Prizes, &c., in Science.

I.—FELLOWSHIPS.

I.—THE FALCONER MEMORIAL FELLOWSHIP.

This Fellowship was founded in 1869 by the Subscribers to the Fund for a Memorial to Hugh Falconer, M.D. (for many years Superintendent of the H. E. I. Company's Botanic Gardens at Suharunpoor and Calcutta), and the Association for the better Endowment of the University of Edinburgh, for the encouragement of the Study of Palæontology and Geology. It is of the annual value of £112, 0s. 4d.; and is tenable for two years, but if the Senatus see fit, it may be held for three years, and with consent of the University Court, for four years. It is awarded after competitive examination in Natural History as applied to Palæontology and Geology, and is open to Graduates in Science or Medicine of this University of not more than three years' standing at the time of the competition. It cannot be held along with any other Fellowship, Scholarship, or Bursary in any Scottish University. The Deed of Foundation will be found at p. 270 of the CALENDAR for 1870-71. The next appointment may be made in July 1897.

1895. *John S. Flett, M.A., B.Sc., M.B., C.M.*

II.—GEORGE HERIOT FELLOWSHIP.

A Fellowship, for Research in Mathematical, Physical, Experimental and Natural Science, is open annually. For further particulars see under Faculty of Arts.

II.—SCHOLARSHIPS.

I.—BAXTER PHYSICAL SCIENCE SCHOLARSHIP.

This Scholarship was founded by Sir David Baxter, Bart., of Kilmaron, in 1865, and is of the annual value of £74, 15s. 4d., tenable for two years. It is awarded, on the result of the Final Examination for the Degree of Bachelor of Science, to the student who is most distinguished in two or more of the Physical Science subjects—viz., Mathematics, Natural Philosophy, Astronomy, Chemistry. The holder is required to satisfy the Senatus Academicus that he has been pursuing his studies in Science during the first year of his tenure in such manner as the Senatus may fix. It cannot be held with any other Scholarship, Fellowship, or Bursary, or with any situation yielding an annual income of £100.

II.—BAXTER NATURAL SCIENCE SCHOLARSHIP.

This Scholarship was founded by Sir David Baxter, Bart., of Kilmaron, in 1865, and is of the annual value of £74, 15s. 4d., tenable for two years.

It is awarded, on the result of the Final Examination for the Degree of Bachelor of Science, to the Student who is most distinguished in two or more of the Natural Science subjects—viz., Human Anatomy, including Anthropology; Physiology, including Histology; Geology, including Mineralogy; Zoology, including Comparative Anatomy; Botany, including Vegetable Histology. The holder is required to satisfy the Senatus Academicus that he has been pursuing his studies in Science during the first year of his tenure in such manner as the Senatus may fix. It cannot be held with any other Scholarship, Fellowship, or Bursary, or with any situation yielding an annual income of £100.

III.-VIII.—VANS DUNLOP SCHOLARSHIPS.

These Scholarships are each of the annual value of £100, and are tenable for three years, on condition that the scholar submits annually—(1) A certificate of attendance on lectures or laboratories approved by the Senatus; or (2) a certificate of having acted as an assistant to a Professor in this or some other University; or (3) a written report of his work done during the year, together with a Thesis composed by himself in connection with some part of that work. For General Regulations, see under Faculty of Arts.

III.—MATHEMATICS.[1]

The next Competition will take place in April 1898.

IV.—NATURAL PHILOSOPHY.[1]

The next Competition will take place in April 1898.

V.—AGRICULTURE AND RURAL ECONOMY.

This Scholarship is open to all Matriculated Students who have regularly attended classes in this University for not less than two and not more than six years, and who have attended the Class of Agriculture and Rural Economy within one year of the date of Competition. The subjects of Examination are Agriculture, Chemistry, Botany, and Veterinary Science. The next Competition will take place in April 1898.

The Examiners are the Professor of Agriculture and an Examiner nominated by the Senatus.

1895. *J. W. Paterson, B.Sc.*

VI.—CHEMISTRY.

(1). The subjects of Examination are—(*a*) Inorganic and Organic Chemistry, and the connection between the Chemical and Physical character of Substances. (*b*) Qualitative and Simple Quantitative Analysis of Inorganic Substances, and the Preparation of Pure Chemical Substances. (2.) The Examination in subjects (*a*) is similar,

[1] For particulars, see "Scholarships" in Faculty of Arts.

and held at the same time, as that for the Second B.Sc. Examination. The Examination in subjects (*b*) is conducted practically in the Laboratory. (3.) The Competition is open to all Students of the University, from the second to the sixth year (inclusive) of their attendance, and will take place in July 1897.

VII.—NATURAL HISTORY, INCLUDING GEOLOGY AND BOTANY.

(1.) The subjects Natural History, Geology, and Botany are coequal in the Examination, and the Examination in each of the three subjects is similar to that for the Second B.Sc. in Pure Science, and consists of two parts—a Written Examination extending over not less than three hours, and a Practical Examination with specimens.

(2.) The next Examination will be held in April 1898, at the same time as the Second B.Sc. Examination.

(3.) The Competition is open to all Students of the University, from the second to the sixth year (inclusive) of their attendance.

1895. *J. A. Murray, B.Sc.*

VIII.—ENGINEERING AND MECHANICAL AND USEFUL ARTS.[1]

The Examination is similar to that for the Second B.Sc. in Engineering, with the addition of questions on prescribed books treating of Engineering and Mechanical and useful Arts.

The Competition is open to all Matriculated Students who have been in regular attendance on the Class of Engineering for at least two Winter Sessions, and who have not been Students of the University for more than four years. The next Competition will take place in April 1897.

The Examiners are the Professors of Engineering and Natural Philosophy.

1894. *W. G. Rennie.*

IX.—STEVEN SCHOLARSHIP IN AGRICULTURE.

This Scholarship was founded in 1882 by the Misses Steven of Bellahouston in memory of their brother Moses Steven, Esq. It is of the value of £75, and is awarded annually, in connection with the Class of Agriculture, the subjects of examination being Agriculture and General and Agricultural Chemistry.

The Scholar is required to visit the annual exhibitions of the four leading agricultural societies, or such as the Professor of Agriculture shall appoint, and to report on his visit or visits to the satisfaction of the Professor of Agriculture. The Exhibitions which the Scholar is required to visit are:—

The Royal Agricultural Society of England.
The Bath and West of England Agricultural Society.

[1] Regulations for this Scholarship may be altered before next award.

The Highland and Agricultural Society of Scotland.
Royal Agricultural Society of Ireland.
See Deed of Foundation at p. 397 of CALENDAR for 1882-83.
1896. *S. F. Ashby.*

X., XI.—HOPE PRIZE SCHOLARSHIPS.

Two Hope Prize Scholarships have been instituted (with funds formerly of the Hope Chemistry Prize founded by the late Professor Thomas C. Hope) in connection with the Chemical Laboratory of the University, each of the value of about £30 per annum, tenable for one year, and awarded annually at the end of the Winter Session. Each Scholarship is awarded to the student whom the Professor of Chemistry thinks most deserving of those who have worked during that Winter Session in the Chemical Laboratory of the University. The scholars must work during the Summer and Winter Sessions succeeding their appointment in the Chemical Laboratory of the University, and must assist the Professor of Chemistry in such manner as he thinks fit in each case, and the scholars are not required to pay fees for the laboratory. In case of resignation of a scholar, or of a scholar failing to fulfil the conditions, the Professor of Chemistry may, if he thinks proper, recommend a student working in the Chemical Laboratory for the remainder of the Scholarship so become vacant, the new scholar so appointed to perform the duties and receive the payments during the remainder of the time for which his predecessor was appointed. Scholars may, in cases of great distinction, be appointed for a second year.

1896. *James Scott.* | *Charles E. Fawsitt.*

XII.—NEIL ARNOTT SCHOLARSHIP IN EXPERIMENTAL PHYSICS.[1]

Is awarded annually in April.

XIII.—THE MACKAY SMITH SCHOLARSHIPS.

These Scholarships were at first intended to have been held in Edinburgh and Glasgow Universities alternately, and were so held in Edinburgh for the Sessions 1883-84 and 1884-85, and in Glasgow for the Sessions 1885-86 and 1886-87. It was, however, afterwards arranged, instead of the Scholarships alternating between the two Universities, that the proceeds of the present investment should be divided—one half being retained by the University of Edinburgh, and the other half transferred to the University of Glasgow, so that each University now acts independently. The portion of the proceeds at present falling to Edinburgh is £50 annually, which provides one Scholarship in Natural Philosophy and one in Chemistry, each of the annual value of £25, tenable for two years, and to be held under such

[1] For particulars see "Scholarships" in Faculty of Arts.

regulations and conditions as the Senatus may from time to time direct. The Scholarship in Natural Philosophy is open for competition to Students who have attended the Class of Natural Philosophy, and the Scholarship in Chemistry to Students who have attended the Class of Chemistry, both in this University. The successful Candidate for the Scholarship in Natural Philosophy is bound to attend the Class of Natural Philosophy, or to prosecute the study thereof, in the University during at least one year of his tenure of the Scholarship, in such way as the Senatus may direct or approve; and the Scholarship in Chemistry is held under similar conditions as regards attendance on the Class of Chemistry, or the prosecution of the study thereof. The next Competition for these Scholarships will take place at the end of Winter Session 1897-98.

1896. *J. H. H. Pirie* (Chem.) | *Alexander Brown* (Nat. Phil.)

XIV.—ROYAL COMMISSION FOR EXHIBITION OF 1851 PHYSICAL SCIENCE SCHOLARSHIP.

The Commissioners in 1891, and again in 1892, gave this University the power of nominating a Student to a Scholarship of £150 a-year, tenable for two years, and which may be extended to three years under the following conditions, viz. (*a*) That he is a British subject; (*b*) That he has been a *bona fide* student of Science in this University for three years; (*c*) That he has been for a full year previous to his appointment, and at the date of his appointment is, a student of the University, or has been a student of the University for a full year ending within twelve months prior to the date of his appointment, and since ceasing to be such student has been engaged solely in scientific study. The Scholarship is limited to those branches of Science (such as Physics, Mechanics, and Chemistry) the extension of which is specially important for the national industries, and may be tenable in any University or other Institution to be approved by the Commissioners. Applications must be made annually not later than the 1st of March. See Regulations, p. 544 of CALENDAR for 1891-92.

Recommended—1896. *J. W. Tullo, B.Sc.*

XV., XVI.—THE ARTHUR TREVELYAN SCHOLARSHIPS IN ENGINEERING.

Two Arthur Trevelyan Scholarships in Engineering, of about £15, 12s. per annum, for proficiency in Engineering and the Mechanical and useful Arts, tenable in this University for two years. Candidates must not be more than nineteen years of age, must have passed the preliminary examination or its equivalent; and must not have attended more than one winter and one summer course in Engineering and field work respectively, either in this University or elsewhere. The subjects of examination are (*a*) Mathematics, as far as the subjects required for the first B.Sc. examination in Engineering; (*b*) Physics to the same extent;

(*c*) Engineering (the subjects of the previous winter session and field work); (*d*) geometrical drawing and elementary graphics. See Excerpt from Deed, page 538 of CALENDAR for 1892-93. One Scholarship is awarded annually in November.

1895. *James Hay.*

XVII., XVIII.—MISSES BAXTER OF BALGAVIE'S SCHOLARSHIPS.

These Scholarships were instituted in 1868 and 1878 by Miss Mary Baxter of Balgavie. They are three in number, two of the annual value of £40, the third of £20. They are in the gift of the Directors of the High School of Dundee, and are open for competition to all pupils who shall have finished their course at the time, or within one year previously, at that School. The examination is held in Dundee by examiners appointed by the Directors, and the subjects are Geometry, Algebra, Trigonometry, and Mechanical Drawing. The Scholarships are tenable for one year certain, and for a second if a favourable certificate is sent to the Directors by the Senatus Academicus. The patrons may extend the tenure of these Scholarships for a further period of one year, provided the holder shall have previously passed the First Examination for the Degree of Bachelor of Science in the Department of Engineering in this University. The Classes to be attended during the first two years are Mathematics, Natural Philosophy (two courses), Engineering (two courses), and Chemistry, and may (by resolution of the Senatus), be attended in any order most convenient to the scholar, provided he intimate his intentions to the Dean of the Faculty of Science beforehand. In the event of a third year's tenure, the Scholar may attend any two classes selected by himself and approved by the Senatus.

These Scholarships are not to be held with any other Scholarship, Fellowship, or appointment yielding £50 per annum. *See* Deeds of Foundation, at page 255 of the CALENDAR for 1869-70, at p. 372 of CALENDAR for 1878-79, and at p. 377 of the CALENDAR for 1881-82.

XIX. GRAY SCHOLARSHIP FOR RESEARCH.[1]

THE WILLIAM DICKSON TRAVELLING FUND.

This is a fund for the purpose of assisting Graduates of any Faculty, of not more than three years' standing, to travel for the purpose of study or research. For particulars, see p. 356.

THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is in the patronage of the Trustees of the British Museum, and is of the annual value of £144. The Trustees may appoint any Graduate in any Faculty of the University who has

[1] For particulars, see under "Scholarships" in Faculty of Arts.

obtained his degree after examination. The office is tenable for five years, at the expiration of which period the Lecturer is ineligible for the next election. The number of lectures is not to be less than twelve in each year, nor more than three in the same week. The course is required to be annually delivered between the first of November and the end of July following, at such public places in the United Kingdom as the Trustees shall approve. The public are admitted without fee. The Lecturer is required at the termination of each course to deposit a copy, or full extract of such course of lectures, with the Principal Librarian of the British Museum, to whom application may be made for further particulars.

Of the foregoing Fellowships, Scholarships, Bursaries, and Prizes, the following are open during the Winter Session 1896-97.[1]

FELLOWSHIPS.[1]

1. *The Falconer Memorial Fellowship*, No. I., page 463.
2. *George Heriot Fellowship*, No. IV., p. 355.

SCHOLARSHIPS.[1]

1. *The Vans Dunlop Scholarship in Chemistry*, No. VI., page 464. The next competition will take place on Monday, 19th July, at 9 and 1 o'clock. Names of Candidates to be given in, and Certificates shown, not later than 1st July.

2. *The Vans Dunlop Scholarship in Engineering and Mechanical and Useful Arts.*[2] The Examination is similar to that for the Second B.Sc. for the degree in Engineering, with the addition of Questions on one or other of the following groups of books at the option of the Candidate :—(1) Mosley's "Mechanics of Engineering"; Tredgold's "Carpentry" (revised by Tarn). (2) Fairbairn, "Mills and Millwork"; Silvanus Thompson's "Dynamo-Electric Machinery." The Competition is open to all Matriculated Students who have been in regular attendance on the Class of Engineering for at least two Winter Sessions, and who have not been Students of the University for more than four years. The Examinations will take place on 29th March and following days at 9 A.M. Candidates are required to give in their names, with a statement of their University standing, to the Clerk to the Senatus on or before 15th March 1897, and, at the same time, to state on which of the two foregoing groups of books they elect to be examined.

[1] For further information, and for information regarding other Fellowships, Scholarships, Bursaries, and Prizes, see above, where full information regarding the conditions and values, &c., are given. The values of the Fellowships, Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise and fall of the rate of interest, &c.

[2] Regulations for this Scholarship under revision. May be altered before next award.

3, 4. *Two Hope Prize Scholarships*, Nos. X. and XI., page 466.

5. *Steven Scholarship in Agriculture*, No. IX., page 465. The competition takes place in March. Candidates to enter names *on or before* 15th March.

6. *Neill Arnott Scholarship for Experimental Physics*, of £38, 10s., is awarded annually to the most distinguished student in the Physical Laboratory.

7. *Arthur Trevelyan Scholarship in Engineering*, No. XV., page 467. The Examination will begin on Saturday, 7th November at 9 A.M. Names to be given in before 20th October.

Competitors for Fellowships and Scholarships must have studied the subjects of Examination at the University of Edinburgh. No Fellowship or Scholarship can be held along with any other University Fellowship or Scholarship.

BURSARIES.[1]

1. *Two Sibbald Bursaries*, of £30 a-year, tenable for three years.[2]

2-6. *Five Heriot Bursaries*, each of the annual value of £30, and tenable for three years.[2]

7. *Renton Bursary*, of about £18, 8s. 6d.[2] The Examination is in English and Elementary Mathematics, and will take place on Saturday, 31st October, at 10 o'clock. Names of Candidates to be entered at the Matriculation Office, *on or before* 23rd October.

8. *The Donald Fraser Bursary*, of £50.[2]

9-12. *Four Buchanan Bursaries*.[2]

University Bursaries cannot be held along with any other Bursary.

PRIZES.[1]

1. *The Gunning Victoria Jubilee Prize in Physiology*.[3]

2, 3. *Two Newton Bursaries or Prizes*.[2]

4. *The Kelland Memorial Prize in Mathematics*.[2]

5. *The Lord Rector's Prize*.[2]

6. *The Ellis Prize in Physiology*.[3]

7, 8. *Two Gray Prizes*.[2]

WILLIAM DICKSON TRAVELLING FUND.

The William Dickson Travelling Fund (page 356).

N.B.—*Scholars, Bursars, or Fellows must apply to the Dean of the Faculty of Science for Certificates to entitle them to draw the instalments due of Science Scholarships, &c., and to the Factor for payment thereof, within three months after they have become payable, otherwise they will be regarded as having resigned. Any who desire to resign must at once announce this to the Dean and to the Factor.*

JAMES GEIKIE, D.C.L., LL.D., F.R.S., &c.,
Dean of the Faculty of Science.

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[1] See footnote 1, page 469.
[2] See under Faculty of Arts.
[3] See under Faculty of Medicine.

Faculty of Divinity.

Dean—Professor TAYLOR.

PROGRAMME OF CLASSES.

The Classes will be opened as follows, and will close on 19th March 1897

Classes.	Days of Opening, and Hours of Lectures.	Professors.	Class Fees.[1]
Divinity.....	27 Oct., 12 o'cl.	Prof. Flint, ...	£3 3
Ecclesiastical History.	27 Oct., 11 ,,	Prof. Taylor,....	3 3
Biblical Criticism.....	27 Oct., 10 ,,	Prof. Charteris,.	3 3
Hebrew—Junior Cl. .	27 Oct., 1 ,,	Prof. Kennedy,.	3 3
Senior Cl. .	27 Oct., 2 ,,	.....	3 3
Arabic—Senior Class. (*Mond., Wed., & Frid.*)	28 Oct., 3 ,,	.....	3 3
Syriac—Junior Class. (*Tues. & Thurs.*)	27 Oct., 3 ,,	.....	2 2

THE SUMMER PREPARATORY CLASSES IN ELEMENTARY HEBREW AND ELEMENTARY ARABIC, conducted by the Class-Assistant under the superintendence of the Professor, open on 4th May, at 10 A.M. and 11 A.M. Fee for Hebrew, £1, 11s. 6d.; and for Arabic, £2, 2s.

GIFFORD LECTURESHIP, for "promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term." *Lecturer*—Professor C. B. TIELE, of Leyden.

The arrangements for the Course in 1896-97 will be announced before the beginning of the Session.

GUNNING VICTORIA JUBILEE LECTURESHIP IN NATURAL SCIENCE. *Lecturer*, HUGH MACMILLAN, D.D., LL.D.

This Course of Three Lectures will be delivered in December 1897, at dates to be afterwards announced.

CLASS ASSISTANTS.

Hebrew and Semitic Languages—DAVID MILLER KAY, B.D., B.Sc.
Divinity—ALEXANDER HORN, B.D.
Examiners for B.D.—GEORGE GARDINER, B.D.; ARTHUR POLLOK SYM, B.D.

MATRICULATION FEES.

For the Academical Year, 1st October to 1st October, . £1 1 0
For the Summer Session only, 1st May to 1st October, . 0 10 6

[1] For Second and Third Attendances in Divinity, no reduction. Subsequent attendances free. For Second Attendances on Hebrew, Ecclesiastical History, and Biblical Criticism, no reduction. Subsequent attendances free. Fee in case of Licentiates of Foreign and Colonial Churches, £2, 2s.

CURRICULUM FOR THE MINISTRY IN THE CHURCH OF SCOTLAND.

The Laws of the Church of Scotland require that every Theological Student, who desires to qualify himself for the Ministry, should attend the Class of *Divinity*, either during *three full and regular Sessions*, or during *two regular and three partial Sessions*;—and also that he should regularly attend during two Sessions each of the Classes of *Hebrew*, *Ecclesiastical History*, and *Biblical Criticism*.

Entrance Examinations.

(1.) Students, before enrolment *for the first year* of their curriculum with a view to the Ministry in the Church of Scotland, must produce to the Professor of Divinity Certificates of their having satisfactorily undergone an Examination in the subjects embraced in the *Curriculum of Arts*, and also in the Elements of Hebrew Grammar. By Act IX. of General Assembly 1872, it is ordained that this Examination shall be conducted at each of the four Scottish Universities, shortly before the commencement of every Session, by four Examining Committees, consisting of members elected by the adjoining Synods, with Conveners nominated by the General Assembly. *The Convener of the Committee for the University of Edinburgh is the Rev. John Alison, D.D., Minister of Newington.* The time of the Committee's meeting and the prescribed subjects of Examination will be timeously advertised in the *Mission Record* of the Church of Scotland.

(2.) Students, before enrolment at the beginning of *every Session after the first* of their course in Divinity, must produce certificates of their having satisfactorily undergone the Examinations prescribed by their respective Presbyteries. For subjects of Examination prescribed by the *Presbytery of Edinburgh*, see *Appendix to Calendar.*

Discourses.

Every Student of Divinity is required during his curriculum to deliver with approbation *six* Discourses upon subjects prescribed by the Professor of Divinity, viz., a Homily, a Latin

Thesis, a Lecture, a popular Sermon, a Hebrew Exercise on a passage of the Old Testament, and an Exercise with additions on a passage of the Greek New Testament.

The following Regulations have been made by the Faculty of Theology in regard to the delivery of these Discourses. (1.) Students of the *first* year shall give in their *Homily* to the Professor of Divinity not later than 1st February; (2.) Students of the *second* year shall give in their *Latin* Thesis not later than the 18th December, and shall be prepared to deliver their *Lecture* not later than the 10th January; (3.) Students of the *third* year shall give in their *Hebrew Exercise* and their *Greek Exercise* with additions, not later than the 18th December, and shall be prepared to deliver their *Popular Sermon* not later than the 2nd of February.

Attendance at Foreign Universities.

The General Assembly of 1868, with the consent of a majority of Presbyteries, enacted and ordained :—(1.) That all Candidates for the ministry shall attend during at least *two sessions* the Theological Classes at one or more of the Universities of Scotland, and shall deliver, with approbation, the Six Trial Discourses required by the Acts of the General Assembly; and (2.) That any Student who wishes to prosecute the remainder of his Theological Curriculum at any Protestant University or Universities not within the bounds of this Church, shall, before repairing thither, undergo satisfactory examination by the Presbytery with which he is connected, and shall, moreover, satisfy the same Presbytery in regard both to the Classes which he proposes to attend, and to the proficiency he has acquired in the language used in the Foreign University in which he intends to study.

Courses in the Faculty of Divinity.

I. DIVINITY.

PROFESSOR FLINT.

The course of study in this class extends over three Sessions. The Subjects of the Lectures during 1896-97 will be :—1. Biblical Doctrine of Man. 2. Biblical Doctrine of Sin. 3.

The Divine Fatherhood and its historical manifestation. 4. The Person and Redemptive Work of Christ. 5. The Prophetical, Priestly, and Kingly Functions of Christ. 6. Christian Ecclesiology.

Lectures will be delivered on Mondays, Tuesdays, Wednesdays, and Thursdays at 12 o'clock. Fridays will be devoted partly to the hearing of Discourses and Exercises, and partly to Lectures.

The work of the class includes two written examinations and an essay.

II. HEBREW AND SEMITIC LANGUAGES.

PROFESSOR KENNEDY.

A.—Hebrew.

Junior Class—1 *to* 2.

This class is conducted in two divisions, an upper and a lower. The latter is intended for students having no previous acquaintance with Hebrew, the former for those who have advanced as far as § 30 of the text-book. The Lower Junior will meet for the first time on the day appointed for the opening of the Arts classes, and thereafter on five days a week with the Professor or the Class-Assistant. Text-books: Davidson's *Introductory Hebrew Grammar*, and the book of Genesis in Hebrew.

The Upper Junior will meet for the first time on the day appointed for the opening of the Divinity classes, and thereafter on three days a week with the Professor or the Class-Assistant. On these days the class will continue the study of the Grammar, including parts of the Syntax (Davidson's *Hebrew Syntax*), and read easy prose passages from the Old Testament. On two days a week the two divisions will meet together for the revision of the Grammar, and for practice in translation into Hebrew.

The students' progress is regularly tested by oral and written examinations throughout the Session.

For Preparatory Class of Elementary Hebrew (see page 471).

Senior Class—2 *to* 3.

Study of Davidson's Hebrew Syntax. Hebrew Prose Composition. Reading of unpointed texts.

Reading and Exposition of portions of the Historical, Poetical, and Prophetical Books of the Old Testament. For Session 1896-97, Deuteronomy i.-xviii.; Psalms, Book ii.; Micah, Nahum.

Discussion of *Critical and Historical* Questions connected with the Books read.

Oral and Written Examinations.

The Senior Hebrew Class will be the Graduating Class in Hebrew for the Ordinary Degree of Master of Arts; and any student who desires to attend this Class with a view to Graduation in Arts must previously pass an examination, in accordance with Sect. IV. subs. 3 of the Regulations.

The examination will include plain passages for translation from and into Hebrew, and grammatical questions.

Those who propose, in a subsequent Session, to take up Hebrew as one of their Graduation Subjects, will have an opportunity of attending the Junior Class in that language during the Session 1896-97.

B.—ARABIC—3 *to* 4.

The course of instruction in Arabic extends over one summer and two winter Sessions.

(1) A Preparatory Class for elementary Arabic is conducted during the Summer Session by the Class-Assistant, under the superintendence of the Professor. *Intending students of Arabic are strongly advised to take this Class.* Text-books: Socin's *Arabic Grammar* (New Edition, 1895) and Jacob's Bible Chrestomathy. The fee is £2, 2s.

(2) A Junior Class in continuation of the above, meeting three days a week in *alternate* sessions (next in 1897-98). Text-books: Socin's *Grammar* and Bruennow's *Chrestomathy of Arabic Prose-pieces* (1895). Elementary Arabic Composition.

(3) A Senior Class, meeting three days a week in *alternate* sessions (next in 1896-97), for more advanced reading in prose and poetry, and for the Study of Arabic syntax and composition. Text-books (besides those already mentioned): The Koran (Fluegel's edition), Margoliouth's *Chrestomathia Beidawiana* (1895), Noeldeke and Mueller's *Delectus Veterum Carminum*

Arabicorum (1890), Wright's *Arabic Grammar* (3rd edit., 1896).

The fee for each of these classes is £3, 3s.

C.—SYRIAC—3 *to* 4.

The Course of instruction in Syriac extends over two winter Sessions.

(1) A Junior Class, meeting on two days a week in *alternate* sessions (next in 1896-97), for the study of the Grammar and the reading of portions of the Syriac gospels. Text-books: Nestle's *Syriac Grammar* (1889), Syriac New Testament (Peshittâ).

(2) A Senior Class, meeting on two days a week in *alternate* sessions (next in 1897-98), for the study of syntax and composition and for more advanced reading in prose and poetry, such as the extracts from Bar-Hebræus and Ephrem Syrus in Roediger's *Chrestomathy* (3rd edit.) and the *Vitæ Prophetarum* in Nestle's *Grammar*.

The fee for each of these classes is £2, 2s.

III. ECCLESIASTICAL HISTORY.

PROFESSOR TAYLOR.

1. *Lectures*—Mondays and Tuesdays.—On The Beginnings of Christianity.

2. *Lectures*—Wednesdays and Thursdays.—On The Reformation in Scotland from 1572.

3. *Text-Book*—Fridays.—Kurtz's "History of the Christian Church." First Division; Second Section.

The work of the class includes three written examinations.

For the Regulations of the Vans Dunlop Scholarship in "History,"—value about £100 annually for three years,—see in CALENDAR under "SCHOLARSHIPS IN ARTS" and "SCHOLARSHIPS IN DIVINITY."

IV. BIBLICAL CRITICISM AND BIBLICAL ANTIQUITIES.

PROFESSOR CHARTERIS.

It is intended to occupy the principal portion of next Session with (i.) Lectures on (*a*) *Old Testament:* some of the Poetical

and Prophetical Books. (*b*) The *New Testament:* Exegetical Lectures on the Fourth Gospel. (ii.) *Textual Criticism:* MSS. and Versions (Scrivener's "Introduction" recommended, Hammond's "Outlines" may be partly used as a handbook). (iii.) Formation of the *Canon of the New Testament:* evidence regarding Gospels and some of the Epistles. See the Professor's text-book "Canonicity."

There will be written and oral examinations, in which all regular students are required to take part; and subjects of occasional voluntary essays will also be suggested.

LECTURESHIPS.

I.—GIFFORD LECTURES ON NATURAL THEOLOGY.

Lecturer—Professor C. B. TIELE of Leyden.

These Lectures were endowed by the late Adam Gifford, Senator of the College of Justice, "for promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term."

According to the Trust Deed, "the lecturers appointed shall be subjected to no test of any kind, and shall not be required to take any oath, or to emit or subscribe any declaration of belief, or to make any promise of any kind; they may be of any denomination whatever, or of no denomination at all; they may be of any religion or way of thinking, or, as is sometimes said, they may be of no religion; or they may be so-called sceptics or agnostics or free-thinkers;—provided only that the 'patrons' will use diligence to secure that they be able reverent men, true thinkers, sincere lovers of and earnest inquirers after truth. I wish the lecturers to treat their subjects as a strictly natural science, the greatest of all possible sciences, indeed, in one sense, the only science,—that of Infinite Being, without reference to or reliance upon any supposed special exceptional or so-called miraculous revelation. The lecturers shall be under no restraint whatever in their treatment of their theme. The lectures shall be public and popular, that is, open not only to students of the Universities, but to the whole community, without matriculation."

II.—THE GUNNING VICTORIA JUBILEE LECTURESHIP.

Lecturer—HUGH MACMILLAN, D.D., LL.D.

With a view to promote the study of Natural Science among candidates for the ministry, and to bring out among ministers the fruits of study in Science, Philosophy, Language, Antiquity, and Sociology, Dr R. H. Gunning, of Edinburgh and Rio de Janeiro, has founded a Lectureship in the Faculty of Divinity of the University of Edinburgh, to be known as "The Gunning Victoria Jubilee Lectureship."

The Gunning Lectureship is a triennial appointment of the value of £100, and the appointment shall be made by the Faculty of Divinity. The lecturer may be any Scottish Presbyterian clergyman at home, or in the Mission field, eminent in Science, Philosophy, Language, Antiquity, or Sociology, and the Lectures may be delivered in the University of Edinburgh, or such other place as the Faculty may appoint.

The next appointment will be made at the close of Session 1898-99. See Revised Scheme, p. 519 of CALENDAR 1889-90.

Class Prize Lists.

WINTER SESSION, 1895-96.

DIVINITY.

FOURTH YEAR.

PRIZEMAN.—Wellwood M. Landale, M.A.

THIRD YEAR.

PRIZEMEN.—1. Walter R. Henderson, M.A.; 2. Sydney Smith, M.A.; 3. Thomas Wilson, M.A.; 4. Wm. Gracie, M.A.; 5. L. Maclean Watt, M.A.

HONOURABLE MENTION.—Thomas O. Duncan, M.A.; John Henderson, M.A., and George Drummond, M.A.—equal.

SECOND YEAR.

PRIZEMEN.—1. W. W. Reid, M.A.; 2. James Wallace, M.A.; 3. Andrew Mutch, M.A.; 4. James Rae Murdoch.

HONOURABLE MENTION.—James L. Buchanan, B.A., and E. J. Mitchell, M.A.—equal.

FIRST YEAR.

PRIZEMEN.—1. Wm. Walker, M.A.; 2. Alex. M. Gordon, M.A.; 3. Robert Whyte, M.A.; 4. J. M. Lacey, M.A.; 5. Alex. Mitchell, M.A.

HONOURABLE MENTION.—Alexander C. Buchanan, B.A., and D. Denholm Fraser, M.A.—equal.

R. FLINT, D.D., *Professor.*

BIBLICAL CRITICISM.

1. W. W. Reid and Thomas Wilson—equal (*Medallists*); 3. W. R. Henderson; 4. Sydney Smith; 5. James L. Buchanan; 6. James Wallace.

ESSAYS.—1. W. R. Henderson and James Wallace—equal; 3. James L. Buchanan and W. W. Reid—equal.

A. H. CHARTERIS, D.D., *Professor.*

ECCLESIASTICAL HISTORY.

PRIZEMEN.—1. Walter R. Henderson, M.A., Edinburgh (*Medallist*); 2. Thomas W. Wilson, M.A., Blairhall, Scone; 3. William Walker, M.A., Edinburgh; 4. John Henderson, M.A., Morebattle; 5. William L. Gordon, M.A., Glenbervie.

HONOURABLE MENTION.—6. George Drummond, M.A., Oban; 7. Alexander M. Gordon, M.A., Halifax, Nova Scotia; 8. David D. Fraser, M.A., Blair Athole.

M. C. TAYLOR, D.D., *Professor.*

HEBREW AND SEMITIC LANGUAGES.

JUNIOR HEBREW CLASS.

PRIZEMEN.—1. John C. Mack, M.A. (*Medallist*); 2. D. Denholm Fraser, M.A., Blair Athole; 3. William S. Simpson, M.A., Leslie; 4. Richard Bell, Dumfriesshire.

HONOURABLE MENTION.—5. Alex. C. Buchanan, B.A., County Down; 6. John Wallace, Ayrshire; 7. G. Scott Phythian, Leeds; 8. Walter G. Mackean, Edinburgh.

SENIOR HEBREW CLASS.

PRIZEMEN.—1. John S. Macdonald, M.A. (*Medallist*), Ross-shire; 2 W. W. Reid, M.A., Inverness-shire; 3. James B. Penman, M.A., Stranraer; 4. Alexander M. Gordon, M.A., Halifax, Canada.

HONOURABLE MENTION.—5. James Wallace, M.A., Mid-Lothian; 6. William Walker, M.A., Edinburgh; 7. Andrew Mutch, M.A., Tillicoultry; 8. Donald Munro, M.A., Aberfeldy.

SPECIAL PRIZE FOR SUMMER READING.—James B. Penman, M.A., and W. W. Reid, M.A.—equal.

SENIOR SYRIAC CLASS.

PRIZEMAN.—Ed. E. Anderson, M.A., Edinkillie. *Proxime Accessit*—Andrew Tweedie, M.A., Swinton.

JUNIOR ARABIC CLASS.

PRIZEMAN.—J. A. M'Ilvride, Edinburgh. *Proxime Accessit*—George N. Dods, Duns.

ARCHD. R. S. KENNEDY, D.D., *Professor.*

———o———

Graduation in Divinity.

REGULATIONS FOR GRADUATION IN DIVINITY.

(*Candidates who began the study of Divinity with a view to Graduation before 1st October* 1895 *are referred to the* CALENDAR *for* 1895-96 *and to previous* CALENDARS.)

I. No one is admitted to examination as a Candidate for the Degree of Bachelor of Divinity (B.D.) unless he be (1) a Graduate in Arts of the University, and have taken a complete Theological Course in a Scottish University or Universities, or in an institution or institutions specially recognised for the purpose by the University Court, or partly in a Scottish University or Universities and partly in such institution or institutions; or (2) a Graduate in Arts of any Scottish University or other University specially recognised as aforesaid, and has completed his Theological Course, of which not less than two years' attendance has been given in this University.

II. The Examiners are the Professors of the subjects included in the examinations, and two additional Examiners appointed by the University Court. The mode of conducting the examination is fixed from time to time by the Senatus Academicus.

III. The subjects of examination are arranged in two departments:—The First Department embracing—(1) Hebrew, and (2) Apologetic Theology, or the Evidences of Natural and Revealed Religion; and the Second Department embracing—(1) Ecclesiastical History, (2) Systematic Theology, and (3) Biblical Criticism and Biblical Antiquities.

IV. Every Student who at the time when these Regulations came into operation had completed a part of his Theological Course with a view to Graduation as B.D., under Regulations hitherto in force, and shall thereafter complete his course of study in conformity with such Regulations, may become a Candidate for the Degree of B.D. without complying with the provisions of these Regulations.

V. The Degree of B.D. is in no case conferred on persons who have not complied with the conditions hereinbefore set forth, and is not conferred *honoris causâ tantum.*

Candidates are required to communicate their names, together with evidence of their being qualified in terms of the above Regulations, to the Dean of the Faculty of Divinity, at least one week before the day appointed for the Examination.

The subjects of examination for 1896-97 are as follows :—

DEPARTMENT I.

I. *Hebrew*—
(1.) Questions in Grammar.
(2.) Translation into Hebrew Prose.
(3.) Micah, Nahum.
(4.) Psalms, Book ii. (Psalms xliii.-lxxii.).
(5.) Deuteronomy i.-xviii. (the unpointed text).

Candidates will be expected to show some knowledge of the history from the call of Isaiah to beginning of the Exile, and of the textual and historical criticism of the books prescribed.

II. *Apologetic Theology*—
(1.) Materialism and Positivism.
(2.) The Preparation in History for Christianity.
(3.) The Life and Work of Christ in relation to Apologetics.

DEPARTMENT II.

I. *Ecclesiastical History*—
(1.) The Main Facts in the Development of the Constitution, Doctrine, and Worship of the Church from 100 to 451 A.D. (2.) The History of the Church in Scotland during the 17th Century.

II. *Systematic Theology*—
(1.) The Sources of Christian Doctrine, and the Place, Functions, Method and History of Christian Dogmatics.
(2.) The Doctrines of the Trinity and Incarnation.
(3.) The Doctrine of the Atonement.

III. *Biblical Criticism and Biblical Antiquities*—
Manuscripts, Versions, and the more important Disputed Passages of the New Testament. (As in Scrivener's "Introduction.")
Introduction to Poetical and Prophetical Books of Old Testament, and Professor Robertson's "Early Religion of Israel."
Introduction to Gospels.
"Canonicity," pp. 53-99, 167-195.

FEES.

Fee for Degree of B.D., . . .	£5 5
When the Examination is taken at two periods—	
The Fee for the First is . . .	3 3
For the Second, ...	2 2

Candidates who fail to pass in one or more subjects pay a fee of 10s. 6d. for re-examination in each subject.

TIME-TABLE AND DATES OF ENTERING FOR EXAMINATIONS, 1896-97.[1]

1896.		
Oct. 13.	Tu.	Names to be entered and fees paid *on or before* this date.[1]
,, 20.	Tu.	Hebrew, 10 a.m. ; Apologetics, 2 p.m.
,, 21.	Wed.	Ecclesiastical History, 10 a.m. ; Divinity, 2 p.m.
,, 22.	Th.	Biblical Criticism, 10 a.m.
1897.		
Mar. 23.	Tu.	Names to be entered and fees paid *on or before* this date.[1]
,, 30.	Tu.	Hebrew, 10 a.m. ; Apologetics, 2 p.m.
,, 31.	Wed.	Ecclesiastical History, 10 a.m. ; Divinity, 2 p.m.
April 1.	Th.	Biblical Criticism, 10 a.m.

Every Candidate for Examination or for Graduation must matriculate for the Academic year in which he appears for Examination or for Graduation, and pay the Fee of £1 for Registration as a Member of the General Council (if not already a Member) *at least one clear day before the date of Graduation.*

The fees for Matriculation, for Examinations for Degrees, and for Registration of Graduates as Members of the General Council, are payable at the Matriculation Office, University. When Candidates cannot attend personally to pay the fees, they should transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed "*Union Bank of Scotland* (*Hunter Square Branch*), *Edinburgh*," and not by cheques on private accounts.

Examination Papers.

DEPARTMENT I.

I. HEBREW.

TUESDAY, 31*st March* 1896.—10 *to* 1 *o'clock.*

A

I. (*a*) Point and translate :—

1 ויאמר יהוה אל משה השכם בבקר

והתיצב לפני פרעה הנה יוצא המימה

[1] When names are not entered, or fees paid, on or before the stated dates, an additional or late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination. A Candidate is not held to be entered for the Examination until his name is entered, the fee paid, and all the necessary certificates, &c., lodged.

ואמרת אליו כה אמר יהוה שלה עמי
2 ויעבדני: כי אם אינך משלח את עמי הנני
משליח בך ובעבדיך ובעמך ובבתיך את
הערֹב ומלאו בתי מצרים את הערב וגם
3 האדמה אשר הם עליה: והפליתי ביום
ההוא את ארץ גשן אשר עמי עמד עליה
לבלתי היות שם ערֹב למען תדע כי אני
4 יהוה בקרב הארץ: ושמתי פְּדֻת בין עמי
5 ובין עמֶך למחר יהיה האת הזה: ויעש
יהוה כן ויבא ערב כבד ביתה פרעה
ובית עבדָיו ובכל ארץ מצרים תשחת
6 הארץ מפני הערב: ויקרא פרעה אל
משה ולאהרֹן ויאמר לכו זבחו לאלהיכם
בארץ:

(*b*) Discuss the derivation of the name מֹשֶׁה given by E. Give the exact force of ו before last word of v. 1; also the syntax of the acc. את־ערב in 2*b*, and of the remaining words of the sentence. In v. 5*b* LXX reads: *καὶ ἐξωλοθρεύθη ἡ γῆ κτλ*; remark on this. How does this version read the word גֹּשֶׁן, and what help does it give us in locating the district referred to?

II. (*a*) Translate:—

1, 2 לָמָּה רָגְשׁוּ גוֹיִם וּלְאֻמִּים יֶהְגּוּ־רִיק: יִתְיַצְּבוּ ו מַלְכֵי־אֶרֶץ

3 וְרוֹזְנִים נוֹסְדוּ־יָחַד עַל־יְהוָה וְעַל־מְשִׁיחוֹ׃ נְנַתְּקָה אֶת־
4 מוֹסְרוֹתֵימוֹ וְנַשְׁלִיכָה מִמֶּנּוּ עֲבֹתֵימוֹ׃ יוֹשֵׁב בַּשָּׁמַיִם יִשְׂחָק
5 אֲדֹנָי יִלְעַג־לָמוֹ׃ אָז יְדַבֵּר אֵלֵימוֹ בְאַפּוֹ וּבַחֲרוֹנוֹ יְבַהֲלֵמוֹ׃
6, 7 וַאֲנִי נָסַכְתִּי מַלְכִּי עַל־צִיּוֹן הַר־קָדְשִׁי׃ אַסַּפְּרָה אֶל־חֹק יְהוָה
8 אָמַר אֵלַי בְּנִי אַתָּה אֲנִי הַיּוֹם יְלִדְתִּיךָ׃ שְׁאַל מִמֶּנִּי וְאֶתְּנָה
9 גּוֹיִם נַחֲלָתֶךָ וַאֲחֻזָּתְךָ אַפְסֵי־אָרֶץ׃ תְּרֹעֵם בְּשֵׁבֶט בַּרְזֶל כִּכְלִי
10 יוֹצֵר תְּנַפְּצֵם׃ וְעַתָּה מְלָכִים הַשְׂכִּילוּ הִוָּסְרוּ שֹׁפְטֵי אָרֶץ׃
11, 12 עִבְדוּ אֶת־יְהוָה בְּיִרְאָה וְגִילוּ בִּרְעָדָה׃ נַשְּׁקוּ־בַר פֶּן־יֶאֱנַף
וְתֹאבְדוּ דֶּרֶךְ כִּי־יִבְעַר כִּמְעַט אַפּוֹ אַשְׁרֵי כָּל־חוֹסֵי בוֹ׃

(*b*) What is peculiar in the plural form לאמים (1)? Give the adverb from ריק; also two Greek words equivalent to מוֹשִׁיחַ. Explain the etymology and inflexion of מוסרותימו (3), and the vocalization of ילדתיך (7). Parse fully תרעם (9), and explain the LXX rendering *ποιμανεῖς*. Remark on syntax of last two words.

(*c*) Indicate some of the attempts (including those of the versions) to explain or emend the first two words of v. 12. What is meant by the "orphan Psalms"? Which Pss. of Bk. I. come under this category?

(*d*) Discuss briefly the Messianic import of this Psalm.

III. (*a*) Translate :—

1, 2 לְדָוִד׀ רִיבָה יְהוָה אֶת־יְרִיבָי לְחֵם אֶת־לֹחֲמָי׃ הַחֲזֵק מָגֵן
3 וְצִנָּה וְקוּמָה בְּעֶזְרָתִי׃ וְהָרֵק חֲנִית וּסְגֹר לִקְרַאת רדפי [רֹדְפַי] אֱמֹר
4 לְנַפְשִׁי יְשׁוּעָתֵךְ אָנִי׃ יֵבֹשׁוּ וְיִכָּלְמוּ מְבַקְשֵׁי נַפְשִׁי יִסֹּגוּ אָחוֹר
5 וְיַחְפְּרוּ חֹשְׁבֵי רָעָתִי׃ יִהְיוּ כְמֹץ לִפְנֵי־רוּחַ וּמַלְאַךְ יְהוָה
6 דֹּחֶה׃ יְהִי־דַרְכָּם חֹשֶׁךְ וַחֲלַקְלַקּוֹת וּמַלְאַךְ יְהוָה רֹדְפָם׃

7, 8 כִּי־חִנָּם טָמְנוּ־לִי שַׁחַת רִשְׁתָּם חִנָּם חָפְרוּ לְנַפְשִׁי: תְּבוֹאֵהוּ
שׁוֹאָה לֹא יֵדָע וְרִשְׁתּוֹ אֲשֶׁר־טָמַן תִּלְכְּדוֹ בְּשׁוֹאָה יִפֹּל־בָּהּ:
9, 10 וְנַפְשִׁי תָּגִיל בַּיהוָה תָּשִׂישׂ בִּישׁוּעָתוֹ: כָּל עַצְמוֹתַי
תֹּאמַרְנָה יְהוָה מִי כָמוֹךָ מַצִּיל עָנִי מֵחָזָק מִמֶּנּוּ וְעָנִי
וְאֶבְיוֹן מִגֹּזְלוֹ:

(*b*) Add short notes on any grammatical, textual, or other peculiarity suggested by the following:—(1) לחם (v. 1); (2) בעזרתי (v. 2); (3) the M. T. of v. 3*a*; (4) the arrangement of clauses in vv. 5 and 6; (5) the M. T. of v. 7; the syntax of לא ידע (v. 8).

(*c*) What textual emendation has been proposed for the following:—

רָאִיתִי רָשָׁע עָרִיץ
וּמִתְעָרֶה כְּאֶזְרָח רַעֲנָן:

(*d*) Discuss the meaning of the phrase שִׁוּב יְשׁוּבוֹת, and say how far we are justified in taking it as an indication of date in any Psalm where it may occur.

B

I. Translation.

I. (*a*) Translate:—

4 מֵאַשֶּׁר יָקַרְתָּ בְעֵינַי נִכְבַּדְתָּ וַאֲנִי אֲהַבְתִּיךָ וְאֶתֵּן אָדָם
5 תַּחְתֶּיךָ וּלְאֻמִּים תַּחַת נַפְשֶׁךָ: אַל־תִּירָא כִּי־אִתְּךָ אָנִי
6 מִמִּזְרָח אָבִיא זַרְעֶךָ וּמִמַּעֲרָב אֲקַבְּצֶךָּ: אֹמַר לַצָּפוֹן תֵּנִי
וְלַתֵּימָן אַל־תְּכַלְאִי הָבִיאִי בָנַי מֵרָחוֹק וּבְנוֹתַי מִקְצֵה הָאָרֶץ:
7 כֹּל הַנִּקְרָא בִשְׁמִי וְלִכְבוֹדִי בְּרָאתִיו יְצַרְתִּיו אַף־עֲשִׂיתִיו:
8, 9 הוֹצִיא עַם־עִוֵּר וְעֵינַיִם יֵשׁ וְחֵרְשִׁים וְאָזְנַיִם לָמוֹ: כָּל־הַגּוֹיִם

נִקְבְּצוּ יַחְדָּו וְיֵאָסְפוּ לְאֶפְיִם מִי בָהֶם יַגִּיד זֹאת וְרֹאשׁוֹנוֹת
יַשְׁמִיעֻנוּ יִתְּנוּ עֵדֵיהֶם וְיִצְדָּקוּ וְיִשְׁמְעוּ וְיֹאמְרוּ אֱמֶת :

(*b*) Remark on the meaning of מאֹשֶׁר in verse 4; and distinguish the signification of the synonymous verbs in verse 7.

(*c*) Discuss the parsing and precise signification of נקבצו in verse 9.

II. (*a*) Translate :—

16, 17 הֵן עַל־כַּפַּיִם חַקּוֹתִיךְ חוֹמֹתַיִךְ נֶגְדִּי תָמִיד : מְהֵרוּ בָנַיִךְ

18 מְהָרְסַיִךְ וּמַחֲרִיבַיִךְ מִמֵּוֵךְ יֵצֵאוּ : שְׂאִי־סָבִיב עֵינַיִךְ וּרְאִי

כֻּלָּם נִקְבְּצוּ בָאוּ־לָךְ חַי־אָנִי נְאֻם־יְהוָה כִּי כֻלָּם כָּעֶדִי

19 תִלְבָּשִׁי וּתְקַשְּׁרִים כַּכַּלָּה : כִּי חָרְבֹתַיִךְ וּשְׁמֹמֹתַיִךְ וְאֶרֶץ

20 הֶרְסָתֵךְ כִּי עַתָּה תֵּצְרִי מִיּוֹשֵׁב וְרַחֲקוּ מְבַלָּעָיִךְ : עוֹד

יֹאמְרוּ בְאָזְנַיִךְ בְּנֵי שְׁכֻלַיִךְ צַר־לִי הַמָּקוֹם גְּשָׁה־לִּי וְאֶשְׁבָּה :

21 וְאָמַרְתְּ בִּלְבָבֵךְ מִי יָלַד־לִי אֵת־אֵלֶּה וַאֲנִי שְׁכוּלָה וְגַלְמוּדָה

גָּלָה וְסוּרָה וְאֵלֶּה מִי גִדֵּל הֵן אֲנִי נִשְׁאַרְתִּי לְבַדִּי אֵלֶּה

אַיֵּפֹה הֵם :

(*b*) What variation is suggested for בָּנַיִךְ, in verse 17, by Lowth, following old versions?

(*c*) In verse 18, LXX version ends *περιθήσεις αὐτοὺς ὡς κόσμον νύμφη*. How does Lowth account for this? What is Lagarde's view?

(*d*) Parse and derive תצרי, in verse 19.

II. Hebrew Prose.

I. When the prince's first-born son stretched out his hand, all perceived that it was snow-white with leprosy. He himself was terribly afraid, and said, "What is this which has happened

to me? Jehovah is surely very angry. If I still refuse to keep His commandments, as I have done this very day, then He will execute judgment upon me: so I will go to Him now, and say, 'Pardon my sin only this once, and remember the covenant which Thou didst swear unto Abraham.'" Going away to God's temple, therefore, he kneeled down before it; for they would not admit a leper: and even while he prayed, the young man's hand was made whole.

II. "And so he laid him down to sleep: and anon, as he was asleep, it befell him that he had a vision. He thought there came a man before him all encompassed with stars; and that man had a crown of gold on his head, and led in his fellowship seven kings and two knights; and all these worshipped the cross (צְלָב), kneeling upon their knees, holding up their hands to heaven, and all they said, 'Fair, sweet Father of heaven, come and visit us.' Then the dreamer looked up to heaven, and it seemed to him that the clouds opened, and that an old man came down with a company of angels and gave them his blessing."

III. Times of Isaiah.

I. Write a short note on Isaiah's immediate relatives and their names.

II. Expand, with one or two dates, the following statement by Driver:—"The period of the reign of Shalmaneser IV. marks the first beginning of an altered attitude on the part of both Israel and Judah towards Assyria, due, at least in a measure, to the encouragement received from the valley of the Nile."

III. Examine the following statement:—"To Isaiah was granted what was refused to his successor Jeremiah—once more to restrain, through the might of his prophetic power arising from the deep and strong spirit of faith, the coming of the night which threatened at the time of the Assyrian judgment to engulf his people."—Delitzsch.

II. APOLOGETIC THEOLOGY.

TUESDAY, 31*st March* 1896.—2 *to* 5 *o'clock.*

MODERN AGNOSTICISM.

1. Trace the historical developments of Agnosticism, and note modern forms of it, philosophical and religious.

2. Discuss the views of any important modern writer on the grounds or foundations of belief.

3. Examine the positions taken up by Modern Agnostics in regard to the proposition—"An eternal existence possessed of consciousness and energy is the First Cause of all things."

4. Comment on the argument—"The conception of a divine will derived from the human will involves, like it, localisation in space and time . . . and is therefore inconsistent with that omnipresent activity which simultaneously works out an infinity of ends."

THE RESURRECTION OF CHRIST AND THE THEORIES REGARDING IT.

1. What does Scripture teach as to the nature of the risen body of our Lord? Examine the views of any three eminent writers on the subject.

2. Consider these statements of Pfleiderer—"According to the testimony of Paul, confirmed by allusions in Mark and Luke . . . Peter, the man of vivid feeling and of generally excitable soul, was the first to come to the conviction that the Crucified One was living." "His conviction worked on the others so that soon they also experienced similar moments of enthusiastic vision."

3. Adduce proof, without referring to the historical books of the New Testament, that Peter, John, and Paul believed in the Resurrection of Christ.

4. Trace the history of belief and controversy regarding the Resurrection of Christ from the close of the Apostolic Age to the end of the Eighteenth Century.

St Paul and his Writings in Relation to Christian Apologetics.

1. What Life of Christ could be constructed from the Epistles of St Paul? Consider the objections that the references to the historical Christ are of a very general character and do not include miracles.

2. By what apologetic arguments does St Paul show (*a*) that Judaism was a preparation for, and was destined to be displaced by Christianity? and (*b*) the reasonableness of the Christian doctrine of the General Resurrection?

3. Give an account of Paley's *Horae Paulinae*, and state your views as to the value of his argument.

4. Give a general view of St Paul's teaching regarding the Resurrection of the Dead, and point out its apologetic interest and bearings.

DEPARTMENT II.

I. CHURCH HISTORY.

Wednesday, 1*st April* 1896.—10 *o'clock.*

The Early Church.

1. Sketch the history of Apologetic literature in the period prior to the Council of Nicæa.

2. Give some account of the Gnosticism of Carpocrates and of Saturninus.

3. Who were the "Three Great Cappadocians"? Give some account of each.

4. Write a note on the following passage: "There were disciplinarians in the Church who contended that the guilt of the *libellatici* was as great as that of the *sacrificati* and *thurificati*."

5. Trace the development of ritual between 150 and 250, and state what general causes may have contributed to such an advance.

6. Outline the nature and history of the Origenistic Controversies, with dates.

7. Give a short narrative of the growth of Mariolatry to the middle of the fifth century.

8. Sketch the history of Manichæism, and indicate briefly its peculiar tenets.

Scottish Church History.

9. Give the substance of the Acts of Parliament of August 1560, directed against Roman Catholicism.

10. Make notes on the following: (*a*) The Negative Confession, (*b*) The Twopenny Faith, (*c*) The Black Acts.

11. Give some account of (*a*) John Durie; (*b*) John Davidson of Liberton; (*c*) Patrick Adamson.

12. Discuss the following: "The idea of spiritual independence . . . unknown by Knox was fully developed by Melville."

13. Enlarge on the following topic: "At this very time [1581] presbyteries were springing into existence."

14. "The year 1596 is peculiarly memorable in the history of the Church of Scotland." Illustrate this statement.

II. SYSTEMATIC THEOLOGY.

Wednesday, 1*st April* 1896.—2 *to* 5 *o'clock.*

The History of Theology in Scotland.

1. What early Scottish Protestant theologians taught Supralapsarian and Infralapsarian doctrines? What views found acceptance in Scotland in the Seventeenth Century, as to (*a*) the nature of sin, (*b*) the necessity of redemption, (*c*) the action of the divine will in Nature, and (*d*) the evidence for Scripture being the Word of God.

2. Describe briefly the doctrinal views of John Cameron, Boston, "The Aberdeen Doctors," Dr Chalmers and Thomas Erskine of Linlathen.

3. What were the characteristics of Scottish Theology in the Seventeenth Century? How are they to be explained? Remark on Buckle's estimate of Scottish Theology in the Seventeenth Century.

4. What have been the chief causes affecting the development of Scottish Theology in the Nineteenth Century?

Subjective Soteriology.

1. Give a connected view of the soteriological teaching of the Ritschlian school of theology, and examine its validity.

2. What views as to "Assurance of Salvation" and "The Perseverance of the Saints" seem to you most in keeping with the teachings of Scripture and experience? Give reasons.

3. Can the Work of the Holy Spirit in Sanctification be distinguished from moral suasion and the providential efficiency of God? Criticise the Romish doctrine of Good Works.

4. How are Regeneration, Repentance, and Faith related to one another? Show that your answer is in accordance with the teaching of the New Testament.

The Bible Doctrines of Creation, Providence, and Man.

1. What phases of New Testament teaching have you noted regarding the nature, the mediating principle, and the purpose of the act of creation? Show how these stand related to the views of the Old Testament and the Old Testament Apocrypha, and explain the Hebrew and Greek words employed to convey the idea of creating.

2. Is it necessary to attempt to harmonise the Elohistic creation narrative in Genesis with the science of Geology? Have attempts to do so succeeded? Indicate reasons for your answers.

3. How has the general idea of Providence been analysed by theologians? What are the chief questions which seem to you to require discussion in connection with the Doctrine of Providence?

4. Discuss, with explanation of terms and reference to important passages of Scripture, the doctrine which explains the nature of man as consisting of three distinct substances.

III. BIBLICAL CRITICISM.

THURSDAY, *2nd April* 1896.—10 *to* 1 *o'clock.*

I.—MANUSCRIPTS AND DISPUTED PASSAGES.

1. At end of Matthew vi. 6 the T.R. has ἐν τῷ φανερῷ, supported by E G K L M S U X Γ Δ Π 33 lat-*a b c f h* syrr goth æth arm.

Omit: BDZℵ 1 vulg lat-*f ff*$_1$ *g k* syr-cu coptt.

Write out the meaning of these symbols; and give some account in detail of—(i) the uncials denoted by Greek Letters; (ii) the cursives; (iii) the old Latin MSS. denoted by italic letters; (iv) the versions other than Syriac and Latin.

2. Name the leading Syriac versions; state their dates approximately; and discuss their comparative values.

3. Acts xx. 28: . . . τὴν ἐκκλησίαν τοῦ Θεοῦ ἣν περιεποιήσατο διὰ τοῦ ἰδίου αἵματος.

What variations are there in regard to the reading of this passage?

Discuss the evidence and state the reading and the rendering which you think best.

II.—HISTORY OF OLD TESTAMENT INTRODUCTION.

Answer either 1 *or* 2, *which are alternative questions.*

1. Mention what services were rendered to the printed text of the Old Testament by *Houbigant* and *Samuel Davidson.*

2. Give some account of the writings of *De Wette* and estimate his critical position as compared with that of *Ewald.*

3. State what you know of *Semler, Herder, Jahn, Reuss.*

4. "The first writer who ever breathed a suspicion that Isaiah was not the author of the last twenty-seven chapters was——"

State what name should fill up the blank, and mention the chief writers who followed him, and also leading defenders of the integrity of the book, before 1850.

III.—Robertson's "Early Religion of Israel."

Answer either 2 *or* 3, *which are alternative questions.*

1. What is the view of the "Sons of the Prophets" taken by the modern school of Old Testament critics? State Professor Robertson's inference from the frequent allusions thereto.

2. What, according to Stade, distinguished the Israelitish conception of Jahaveh from the conceptions of the heathen with regard to their deities? How does Professor Robertson deal with this point?

3. Remark on the accuracy of topographical details in the Biblical narratives as a testimony to their historical value.

4. "Though I write for him My law in ten thousand precepts, they are counted as a strange thing."—Hosea viii. 12, R.V.

Show the value of this passage as a witness to the early codification of law, and state how Wellhausen evades its force.

5. Do the prophets deny the Divine authority of sacrifice?

IV.—The Pastoral Epistles.

Answer either 3 *or* 5, *which are alternative questions.*

1. When were these Epistles written, if by St Paul?

Show why you fix on this date, and compare other theories as to their date.

2. State and examine the arguments for a second imprisonment of St Paul.

3. By whom was Timothy ordained? Examine the leading texts which bear on his ordination.

4. As suggested by the circumstances of Timothy's life, and by the teaching of the Pastoral Epistles, have you come to any conclusions regarding the "Apostolical Succession" of office in the Christian Church?

5. 1 Timothy v. 17: Οἱ καλῶς προεστῶτες πρεσβύτεροι διπλῆς τιμῆς ἀξιούσθωσαν, μάλιστα οἱ κοπιῶντες ἐν λόγῳ καὶ διδασκαλίᾳ.

Translate and comment upon this passage, especially upon προεστῶτες and κοπιῶντες.

6. What is the nature and value of the argument against the Pauline authorship of these epistles founded on style?

THE DEGREE OF BACHELOR OF DIVINITY.

1st August 1895.

John Anderson, M.A.

11th April 1896.

James Croskery, M.A.
George Drummond, M.A.
William Lindsay Gordon, M.A.
John Henderson, M.A.
Walter Robertson Henderson, M.A.
Henry Maclaurin Lamont, M.A.
Thomas Pullar, M.A.
Sydney Smith, M.A.
Charles Henry Titterton M.A.
Thomas Wilkie Wilson.

DEGREE OF DOCTOR OF DIVINITY (D.D.).[1]

The Degree of Doctor of Divinity is conferred *honoris causâ tantum*, —and is granted in absence in special cases only. The Register of Doctors of Divinity begins in 1709, with the names of Edmund Calamy, Daniel Williams, and Joshua Oldfield. The names of Evans, Harris, and Isaac Watts follow in 1728. The Register now includes above 300 names.

The following is a list of those who have received the Degree of Doctor of Divinity in the years 1889-96 inclusively[2]:—

1889.

*Griffith John.
*Professor Abraham Kuenen.
Archibald Henry Sayce, M.A.
Norman M. L. Walker.

1890.

David Douglas Bannerman.
R. H. Lundie, M.A.
Canon J. H. Overton.

1891.

Richard Glover.
Robert Hutton, M.A.
*John Gibson Paton.
D. W. Simon, M.A., Ph.D.

1892.

William Balfour.
Cornelius Giffen.
Newham Hall.

1893.

Thomas Nicol, B.D.
Thomas B. W. Niven.
George Adam Smith.
James Wells, M.A.

1894.

William Hastie, M.A., B.D.
J. A. M'Clymont, M.A., B.D.
J. C. M'Phail.
William Muirhead.

1895.

Robert G. Balfour.
*Alexander Marshall, M.A.
Charles Moinet, M.A.
John Patrick, M.A., B.D.
J. Guinness Rogers, B.A.
*David Sidey.

11th April 1896.

Rev. Alexander Williamson, West St Giles' Church, Edinburgh.

29th May 1896.

Rev. David Clement Scott, B.D., Blantyre, Central Africa.

[1] Those to whom the Degree has been offered, if unable to be present at the Graduation Ceremonial immediately ensuing, may present themselves at any subsequent ceremonial, on giving at least a week's notice.

[2] The names of those who received the Degree, prior to 1859, will be found in the "Catalogue of the Graduates in the Faculties of Arts, Divinity, and Law of the University, since its foundation," published in 1858, and the names of those who received the Degree from 1859 to 1888, both years included, will be found in the List of Graduates, published in 1889.

* Conferred *in absentia*.

Bursaries, Scholarships, Fellowships, &c.

I.—BURSARIES.

A.—Presentation Bursaries.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursrs.	Years.	Annual Allowance to each Bursar.	Patrons.
I.	1703	Agnes Nairne.	£3 0 0	1	1	..	Senatus Academicus.
II.	1715 1764	Sir James M'Lurg of Vogrie, sometime Dean of Guild of Edinburgh; and Rev. John Penman, Minister of Bothkennar.	16 6 8	1	4	£16 6 8	Capt. R. G. G. Gilmour of Craigmillar, 1st and 3rd Presentations. The Dean of Guild of Edinburgh, 2nd Presentation. Heirs of William Brown, surgeon, 4th Presentation.
III.	1766	Rev. Robert Alexander, Minister of Girvan.	About 19 0 0	1	4	About 19 0 0	Kirk-Session of Girvan and Presbytery of Ayr.
IV.	1838	Robert Blair, D.D., Barton St Andrews, Norfolk	14 8 0	1	4	14 8 0	Governors of George Heriot's Trust.
V.	1838	Do. Do	About 23 0 0	1	4	About 23 0 0	The Principal, and Profs. of Hebrew, Divinity, Church History.

I. In abeyance at present.

II. The *M'Lurg and Penman Bursary* is tenable for four years at the Theological Classes. No person shall be presented to the Bursary who is not a Master of Arts of a Scottish University.

III. This Bursary consists of the interest of £420, lent on heritable security, and of £75, 17s. of accumulated interest. It must be held by a Student from the parish of Girvan, presented by the Session; whom failing, by one within the Presbytery of Ayr, to be appointed by the Presbytery.

IV. The *Blair Bursary* can be held only by a young man who has been brought up in George Heriot's Hospital, and has become a Student of Divinity in the University of Edinburgh. The amount depends on the rate of dividend payable on the stock in which the foundation money is invested.

V. To be applied for the benefit of a Student of Divinity, whether a graduate or not. *Bursar*—1895, *J. R. Spottiswood.*

B.—Competition Bursaries.[1]

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1646	Buchanan of that Ilk.	£20 16 8	1	3	£20 16 8	Town Council.
II.	1666	William Struthers &	21 7 9	1	3	21 7 9	Do.
	1685	Archbishop Leighton.					
III.	1687	Andrew Ramsay and Sir Andw. Ramsay of Abbotshall.	16 13 4	1	3	16 13 4	Do.
IV.	1695	King William III.	50 0 0	2	2	25 0 0 About	Senatus Academicus.
V.	1867	Miss Mary Ettles of Inverness.	118 9 0	3	3	39 9 8	Senatus.
VI.	1873	Grierson of Ogscastle's Trustees.	80 0 0	3	1	26 13 4 About	Senatus.
VII.	1878	Mrs Isabella Webster.	150 0 0	2	3	50 0 0	Senatus.
				1	3	33 7 4	
VIII.	1878	Dr Andrew Thomson	100 0 0	4	4	25 0 0	Trus. of Dr Thomson.
IX.	1879	Mrs Barbara Mylne.	30 0 0	1	3	30 0 0	Moderator, Procurator, and Principa Clerk of Genera Assembly.
X.	1838	J. Stewart Hepburn of Colquhalzie, Esq.	13 2 6	1	3	13 2 6	Committee of th Presbytery of Edin
XI.	1858	Do. Do.	13 2 6	1	3	13 2 6	Do.
XII.	1864	Do. Do.	13 2 6	1	3	13 2 6	Do.
XIII.	1882	William Renton.	19 17 8	1	3	19 17 8 About	Profs. of Theology.
XIV.	1884	Robert Hunter.	33 15 0	2	2	16 17 6	Principal and Profs.
XV.	1889	James Simson, Edinburgh.	175 0 0 About	7	3	25 0 0 About	Presbytery of Edin burgh.
XVI.	1892	Thomas Lockerby, London.	32 0 0	1	3	32 0 0	Senatus.
XVII.	1856	John Sharp, Esq., Perth.	18 0 0	1	4	18 0 0	The Presbytery o Perth.

I. The Buchanan Bursary is open for competition to all Masters of Arts of any o the Universities of Scotland, or to Students who have passed the necessary Exam inations for the Degree of M.A., but have deferred their Graduation with a view t Honours, and who are entering on their first or second Session in the Faculty o Divinity in the University of Edinburgh. No person is admissible to competitio who has for more than one Session been a Student in the Faculty of Divinity any of the Scottish Universities. The Bursar holds the Bursary for three year subject to this condition, that he shall, during that period, give regular attendanc as a Student of Theology, in the University. If it appears to the Senatus Aca emicus desirable, for the purpose of distributing the benefits of competiti Bursaries in Theology among Students of different years, it is lawful, for th purpose only, to appoint a Student for a shorter period. No person can hold t Bursary along with any other Bursary, Fellowship, or Scholarship in any Scotti University.—Vacant.

II. The Struthers and Leighton Bursary is open by competition to all Studer

[1] The values of these Bursaries are subject to deduction of the fees paid to the Examiners.

who are Masters of Arts, or who have passed all the examinations necessary for admitting them to the degree of Master of Arts, and who are entering on their first session of attendance in the Faculty of Divinity in the said University.—Vacant.

III. By Ordinance, No. 81, of the Univ. Com., and subsequent Order in Council, the regulations for this Bursary are the same as those for the Buchanan Bursary. *Bursar*—1893, *Donald Munro, M.A.*

IV. By Ordinance, No. 76, of the Universities' Commissioners, and subsequent Order in Council, each King William Bursary is open to competition to all Masters of Arts of any of the Universities of Scotland, or Students who have passed the necessary examinations for the Degree of M.A., and who have attended for one Session, and no more, in the Faculty of Divinity in the University of Edinburgh: Provided that no person shall be a competitor who has attended for one or more Sessions in the Faculty of Divinity in any other of the Scottish Universities. The examinations in the competition shall be conducted by the Professors in the Faculty of Divinity in the University. Each Bursar shall hold his Bursary for two years, subject to the condition that he shall, during that period, give regular attendance as a Student of Theology in the University. No person shall hold either of the Bursaries along with any other Bursary, Fellowship, or Scholarship of any Scottish University. When the two Bursaries fall vacant at one time, one Bursar shall be appointed for two years, and the other for one year. *Bursar*—1896, *W. L. Webster.*

V. Founded in memory of her brother, J. Ettles, Esq., of Havannah. Open to those who have passed all the examinations for M.A., and are in the first year of their theological course. Cannot be held with any other Bursaries or Scholarships. *See* Deed of Foundation in CALENDAR for 1867-68. *Bursars*—1893, *Frederick Hendry, M.A.* 1894, *W. W. Reid, M.A.* 1895, *William Walker, M.A.*

VI. As in the case of the Faculty of Arts (see No. XLVII.), a student from the parishes of Crawford or Leadhills, is, if found duly qualified in respect of attainments, appointed to a Bursary in his first year, and holds it (unless he has failed to show himself a diligent student) to the end of his Theological curriculum. Failing any student from those favoured parishes, the Bursary or Bursaries will be thrown open to competition, but the winner only holds his Bursary for one year in each case. In the second and third years a student from Crawford or Leadhills has again a preference, but holds the Bursary for one year only. *See* p. 372 of CALENDAR, 1877-78. *Bursars*, 1895—First year, vacant; second year, *R. G. Jamieson, M.A.*; third year, *George Drummond, M.A.*

VII. Founded by Mrs Isabella Webster, 38 Heriot Row, Edinburgh, in memory of her husband, George Webster, Esq. There are three Bursaries,—two of about £43 each, and one of £37, 10s., open to Students of Divinity in connection with the Church of Scotland in their first year, who have successfully passed all their Examinations for the degree of M.A. in any Scottish University, whether they have actually graduated or not. Each is tenable for three years. *See* Deed of Foundation in CALENDAR for 1878-79, p. 377. *Bursars*—1893, *Thomas V. Wilson, M.A.* 1894, *James Wallace, M.A.* 1895, *A. W. Gordon, M.A.*

VIII. For the *Thomson Bursaries* application may be made to Messrs Traquair, Dickson & Maclaren, 11 Hill Street. Candidates of the name of Thomson or Traquair, or natives of the town or county of Dumfries, or of the city of Edin-

burgh, preferred. The subjects of Examination are Latin and Classical Greek, Mathematics and Natural Philosophy, Mental Philosophy (including Logic) and Moral Philosophy and Elementary Hebrew, Apologetics, and Greek Testament. *See* p. 374 of CALENDAR for 1880-81. *Bursars*—1893, *Sydney Smith, M.A.* 1894, *Murray Corson, M.A.* 1895, *William, Simpson, M.A.*

IX. *Mylne Bursary.*—Founded by Mrs Barbara Macaulay or Mylne, in memory of her husband, the Rev. Andrew Mylne, minister of the parish of Dollar. The Bursary (being the free proceeds of £750) which is for behoof of Students for the ministry of the Church of Scotland, of Scottish birth, tenable during the curriculum in Divinity, is awarded at the end of the session, after examination (of first year's students) on the subjects taught in the Theological Classes during the session. No one may become a Candidate who has not given his whole time to study during the session preceding the date of Examination, nor may the holder engage in paid work during any session in which he holds the Bursary. It cannot be held along with any other Bursary, Scholarship, or Endowment. *See* Deed of Foundation at page 377 of CALENDAR for 1880-81—Vacant.

X., XI., and XII. The sums attached to these Bursaries are payable to Divinity Students of the Church of Scotland of the first or second year towards the expense of their education at the University of Edinburgh. Each is tenable for three years. For one bursary Gaelic-speaking students have a preference.

XIII. Founded by the late William Renton, of 20 Royal Terrace, Edinburgh. The Faculty of Theology are the Patrons and Trustees. The Bursary may be held for three years, if the Bursar continues so long to prosecute his studies in Theology at the University of Edinburgh, with a view to the ministry in the Church of Scotland, and if not, then for the whole period he continues at the same. The student presented must have attained the age of sixteen, and not exceed the age of twenty-one years, and must be appointed after an examination in the month of November on such subjects as the Professors of the Faculty of Theology consider proper. *Bursar*—1893, *Walter R. Henderson, M.A.*

XIV. Founded by the late Robert Hunter, Dalhousie, Chesters; the Principal and Professors being Patrons. These Bursaries are for the benefit of Students of the Church of Scotland, and are awarded at close of first Session in Divinity and are tenable for two years. Bursars must attend two Sessions in Chemistry and Geology, taking at least one of these Classes each Session. Students of the name of Hunter and Hamilton from the parishes of Temple or Cockpen have a preference, but preferential Candidates must attain to a fixed percentage. Bursars must produce certificates of diligence in the Classes of Chemistry and Geology. See excerpt from Deed of Foundation, page 437 of CALENDAR for 1885-86. *Bursar*—1894, *Henry M. Lamont, M.A.*

XV. These Bursaries are open to Students who are entering on their first Session in Divinity, and are tenable for three years. For further details and subjects of examination (which differ somewhat from the University Examination for first year's Bursaries), apply to the Rev. Dr Langwill, Currie, or to the Rev. John Patrick, Greenside, Edinburgh. *Bursars* — 1893, *John Henderson, M.A. Thomas Duncan, M.A.; George White, M.A.* 1894, *J. L. Buchanan: J. K. Murdoch: Andrew Mutch.* 1895, *A. C. Buchanan; A. W. Mitchell.*

XVI. Founded by the late Thomas Lockerby, Esq., London. The Bursary tenable for three years, and is open to "Students who desire to become ministe

of the Church of Scotland only." *See* Excerpt from Disposition, page 545 of CALENDAR for 1890-91. *Bursar*—1895, *D. Denholm Fraser, M.A.*

XVII. *Sharp Bursary.*—This Bursary is of the annual value of £18, tenable for four years. The Bursar must be a Student of Divinity of the Church of Scotland, and may prosecute his studies at any one of the Scottish Universities. Preference to any student being a native of or subject to the jurisdiction of the Presbytery of Perth. Apply to the Patrons.

C.—PRESENTATION BURSARIES, open only to Graduates or Students who have passed the necessary Examinations for the Degree of M.A., but have deferred their Graduation with a view to Honours.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1695	Robert Bayne of Pitcairley.	£25 0 0	1	3	£25 0 0	Society of Sons of the Clergy.
II.	1695	James Nairne.	16 13 4	1	3	16 13 4	Prof. of Divinity.

I. This formerly belonged to Ferguson of Raith, and was sold by him to the late Principal Lee; and by Principal Lee's representatives to Professor Crawford; and by Professor Crawford's representatives to the Society for the Sons of the Clergy. By Ordinance, No. 71, of the Universities' Commissioners, and subsequent Order in Council, the following are the regulations as to this Bursary:—Each Bursar shall hold the Bursary for three years, subject to the condition that he shall, during that period, give regular attendance as a Student in Theology in the University of Edinburgh. No person shall hold the Bursary along with any other Bursary, or with any Scholarship in the University. *Bursar*—Vacant.

II. This Bursary is tenable for three years, or for such period as the Bursar shall give regular attendance as a Student of Theology in the University of Edinburgh. *See* Ordinance, No. 67, of the Universities' Commissioners, and subsequent Order in Council. *Bursar*—1896, *J. C. Mack, M.A.*

D.—BURSARIES gained in Faculty of Arts, the holders of which are at liberty to study in the Faculty of Divinity.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1809	Dr Donald Grant, London.	£180 0 0 About	2	4	£90 0 0 About	Dr Grant's Trustees.
II.	1846	John Jamieson, Edinburgh.	26 0 0 About	1	4	26 0 0 About	Principal and two Professors.
III.	1871	The Sibbald Trustees.	150 0 0	5	3	30 0 0	The Trustees of Dr J. R. Sibbald.
IV.	1889	Daniel Maclaurin, London.	70 0 0	1	4	70 0 0	Town Council.

I. *See* under Faculty of Arts.
II. *See* under Faculty of Arts.
III. *See* under Bursaries in Arts.
IV. *See* under Faculty of Arts.

II.—PRIZES.

I.—BARTY MEMORIAL PRIZE.

The Barty Memorial Prize of £20 for scholarship in Hebrew and Hellenistic Greek is open to entrants to the Divinity Halls of the four Scottish Universities.

II.—HEPBURN PRIZE.

The Hepburn Prize of £25 (which may be divided), open to all Students in actual attendance at the Divinity Hall, may be awarded annually for an essay on a prescribed subject.

III.-XII. THE GUNNING VICTORIA JUBILEE PRIZES.

With a view to promote the study of Natural Science among candidates for the ministry, and to bring out among ministers the fruits of study in Science, Philosophy, Language, Antiquity, and Sociology, Dr R. H. Gunning, of Edinburgh and Rio de Janeiro, has founded ten prizes in the Faculty of Divinity of the University of Edinburgh, to be known as "The Gunning Victoria Jubilee Prizes."

These prizes are ten in number, and comprise a series of five prizes of £50, £40, £30, £20, and £10, for excellence in Theological subjects, and a series of five prizes of similar values for excellence in Natural Science subjects. In their order the prizes in each series correspond in value. A minimum standard of proficiency will be required in each series. The successful competitors may each take both the prize in the Theological, and the prize in the Natural Science series to which their marks may respectively entitle them.

The prizes are competed for triennally at the close of the Divinity Session, and are open to all Students of the Church of Scotland, or other Scottish Churches holding the Confession of Faith, who are graduates of this University, or have attended two classes in the Faculty of Divinity in this University, and who have completed their Theological curriculum within two years of the close of the session when the competition takes place.

The examination in the Natural Science series will be on Natural History, Botany, and Geology, and of the same standard as the First B.Sc. Examination in Pure Science. The examination in the Theological series will be in Theology proper, the Language and Literature of the Old Testament, Ecclesiastical History, and Biblical Criticism.

The Examiners are the Professors of the subjects of examination in the University of Edinburgh; with the addition of a member of the Senatus of the New College, to be appointed by the Faculty of Divinity. See Revised Scheme, p. 519 of CALENDAR 1889-90.

The next examination under this scheme will be held at the close of Session 1898-99.

1896. *Theological Series*—1st Prize—Thomas Pullar, B.D.
2nd ,, William Smith, B.D.
3rd ,, John Henderson, B.D.
4th ,, George Drummond, B.D.
5th Prize not awarded.

Natural Science Series—1st Prize—Thomas Pullar, B.D.
2nd Prize not awarded.
3rd ,, William Smith, B.D.
4th ,, George Drummond, B.D.
5th ,, John Henderson, B.D.

III.—SCHOLARSHIPS.[1]

I.—PITT CLUB DIVINITY SCHOLARSHIP.

This Scholarship was instituted in 1862 by the Pitt Club, is of the annual value of £107, 11s. 2d. (under deduction of Examiners' fees), and is tenable for three years. By Ordinance No. 77, of the Universities' Commissioners, this Scholarship is open to competition to all Masters of Arts of any of the Universities of Scotland who have given regular attendance in the Faculty of Divinity in the University of Edinburgh for three complete Sessions, and who are in the course of studying, with the view of becoming Clergymen of the Church of Scotland. No person is admissible who has been entered as a Student of Divinity more than six years prior to the time of the competition.

Candidates are examined on (1) The Evidences of Revealed Religion; (2) Systematic Theology; (3) Hebrew; (4) Church History; (5) Biblical Criticism. It cannot be held with any other Scholarship, Fellowship, or Bursary of any Scottish University, or along with any parochial or pastoral charge, whether as minister or assistant.

1896. *T. W. Wilson, M.A., B.D.*

II.—MAXTON DIVINITY SCHOLARSHIP.

This Scholarship was founded by the Trustees of the late John Maxton, Esq., in 1867, is of the annual value of £42, 8s. (under deduction of Examiners' fees), and is tenable for three years. It is open only to Students who are members of the Established Church of Scotland, and who have completed the course of study in the Faculty of Divinity in the University of Edinburgh. *See* Deed of Foundation, at p. 234 of CALENDAR for 1867-68.

1896. *W. R. Henderson, M.A., B.D.*

III.—THE GLOVER DIVINITY SCHOLARSHIP.

This Scholarship was founded in 1875 by Subscribers to a Fund for commemorating the memory of the Rev. W. Glover, D.D., and by the

[1] The names of Scholars are retained in the Calendar for five years.

It has been agreed by the Senatus and the Faculty of Divinity, in regard to the Fellowships and Scholarships of the funds of which they are severally the administrators, that

1. The *Pitt Theological Scholarship* shall be competed for when it falls vacant.
2. The *Aitken Theological Scholarship* shall be reserved from competition when it falls vacant in the same year with the Pitt.
3. The *Glover Divinity Scholarship* shall (according to its conditions) not be open to competition when the Pitt or Maxton may be open, and shall be similarly reserved when the Aitken is open.
4. That meanwhile the *Maxton* be competed for when it is vacant.

University Endowment Association. It is of the annual value of about £37, 18s. (under deduction of Examiners' fees), tenable for three years, and open to all Masters of Arts of any of the Universities of Scotland who have finished their study of Theology, before entering the Church of Scotland, within six years, and who have attended the last Session of their course at least in the University of Edinburgh. It cannot be held with any other Divinity Scholarship or Bursary in any Scottish University, and it is not offered for competition in any year where there is a vacancy in the Pitt Divinity Scholarship or the Maxton Divinity Scholarship. *See* Deed of Foundation, at p. 343 of CALENDAR for 1875-76.

1894. *Robert Venters, M.A., B.D.*

IV.—THE AITKEN THEOLOGICAL SCHOLARSHIP.

This Scholarship, founded in 1875 by bequest of the Rev. David Aitken, D.D., formerly minister of Minto, is of the annual value of £97, 1s. 8d. (under deduction of Examiners' fees). Its purpose is to make provision for the study of Church History and Biblical Criticism at one or more University Seats in Germany, or elsewhere on the Continent of Europe, in the case of meritorious students at Edinburgh University. It is to be awarded, after competitive examination (on due proficiency being shewn), to a Student in Divinity of the University of Edinburgh, who is a Graduate in Arts of that University of not more than four years' standing. It is tenable for two years; but the Senatus may extend the term for another year if it appear to them desirable. The time of the competition to be fixed and publicly intimated by the Senatus at least three months before; and the Senatus are also at liberty to prescribe whether one Semester or two Semesters in the foreign University shall be attended in each year. It is not offered for competition in the same year as the Pitt Divinity Scholarship or the Glover Divinity Scholarship. *See* Deed of Foundation at p. 344 of CALENDAR for 1876-77.

1895. *William Smith, M.A.*

V.—THE DAVID KIDD DIVINITY SCHOLARSHIP.

This Scholarship, which is of the annual value of £34, 6s. 10d. (under deduction of Examiners' fees), is tenable for three years, and is awarded, after competitive examination in Theology (same as for B.D.), to students of any of the Universities of Scotland who are natives of Scotland, and who have finished their course of study with the view of becoming Ministers of the Church of Scotland. *See* Deed of Foundation in CALENDAR for 1879-80, p. 354.—Vacant.

VI.—VANS DUNLOP SCHOLARSHIP IN HEBREW AND ORIENTAL (SEMITIC) LANGUAGES.

(*See Scholarships in Faculty of Arts.*)

VII.—VANS DUNLOP SCHOLARSHIP IN HISTORY.

(*See Scholarships in Faculty of Arts.*)

VIII.—BRUCE OF GRANGEHILL AND FALKLAND SCHOLARSHIPS.

These Scholarships were founded in 1865 by Mrs Tyndall Bruce of Falkland, and are of the annual value of £100. They come into operation only when a vacancy occurs in any one of the three Scholarships of this name in the Faculty of Arts, by the death, resignation, or dismissal, of a Scholar during the period of his tenure of the Scholarship; and are tenable in this Faculty during the remainder of that period. They cannot be held with any other Scholarship or Fellowship of a Scottish University, or with any situation yielding an income of £100 a year. The subjects of Examination are prescribed from time to time by the Faculty.

1894. *T. W. Wilson, M.A.; W. J. Pennell, M.A.*

IX. and X.—THE JEFFREY SCHOLARSHIPS.

These Scholarships, two in number, were founded in 1887 by Miss Jane Jeffrey of Victoria Terrace, Portobello. They are each of the annual value of about £73, 2s. 6d. (under deduction of Examiners' fees), and are tenable for one year. They are awarded annually for special proficiency in the subjects embraced in each of the four departments of Divinity, Hebrew and Semitic Languages, Ecclesiastical History, and Biblical Criticism; and are open to Students of Divinity in connection with the Church of Scotland who shall have given regular attendance for at least one Session on the Divinity Classes in this University, including the class with which the Scholarship competed for is specially connected. They are competed for in the following order:—first year, Divinity, and Hebrew and Oriental Languages; second year, Ecclesiastical History and Biblical Criticism; and so on from year to year. The Examination at the close of Session 1895-96 is in Ecclesiastical History and Biblical Criticism. *See* Deed at page 497 of CALENDAR for 1888-89.

1896. *Ecclesiastical History*—James Wallace, M.A.
Biblical Criticism—J. L. Buchanan, B.A.

XI.—COBB SCHOLARSHIP.

This Scholarship, founded in 1889, is a bequest by the late Miss Matilda Johnston Cobb, Broughty Ferry. It is of the annual value of £32, 10s. (under deduction of Examiners' fees), and is tenable for three years. The subjects of Examination are Hebrew, Greek, Latin, and Mathematics, and the Scholarship is open to competition amongst Students who are entering on the study of Divinity with a view to becoming Ministers of the Church of Scotland.

1893. *Andrew Tweedie, M.A.*

XII. GRAY SCHOLARSHIP FOR RESEARCH.[1]

XIII.—THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is open to Graduates in any of the Faculties in the University who have obtained their Degrees after examination. For further particulars, see page 468.

SCHOLARSHIPS, BURSARIES, AND UNIVERSITY PRIZES, OPEN FOR COMPETITION IN THE FACULTY OF DIVINITY DURING THE ACADEMIC YEAR COMMENCING 1ST OCTOBER 1896.[2] [3]

I. PRESENTATION BURSARIES.

1. *The Alexander Bursary*, No. III., page 495.
2. *The Blair*, No. V., page 495.

II. PRESENTATION BURSARIES. OPEN ONLY TO GRADUATES OR STUDENTS WHO HAVE PASSED THE NECESSARY EXAMINATION FOR THE DEGREE OF M.A., BUT HAVE DEFERRED THEIR GRADUATION WITH A VIEW TO HONOURS.

The James Nairne Bursary, No. II., page 499.

III. COMPETITION BURSARIES.

The Bursary Examination at the beginning of Session 1896-97 will be held on Friday, 6th, and Saturday, 7th November, commencing at 10 A.M. each day, when the following Bursaries will be open for competition :—

1. *The Buchanan Bursary*, No. I., page 496.
2. *The Struthers and Leighton Bursary*, No. II., page 496.
3. *The Ramsay Bursary*, No. III., pages 496 and 497.
4. *One Ettles Bursary*, No. V., pages 496 and 497.
5. *One Webster Bursary*, No. VII., pages 496 and 497.
6. *One Thomson Bursary*, No. VIII., pages 496 and 497. Candidates are required to intimate their intention to compete to the Agents for the Trustees, Messrs Traquair, Dickson, & Maclaren, W.S., 11 Hill Street, Edinburgh, before 1st November 1896.
7. *The Renton Bursary*, No. XIII., pages 496 and 498.
8. *The Cobb Scholarship*, No. XI., page 503.

The subjects of examination for the above, and for *any other ordinary competition Bursary for first year's Students that may be vacant* at the opening of the Session will be—

[1] For particulars, see Scholarships in the Faculty of Arts.

[2] *Note.*—None of the undernoted Bursaries or Scholarships can be held along with any other Bursary, Fellowship, or Scholarship in any Scottish University. None of the after-mentioned Prizes are subject to this condition.

[3] The values of the Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise or fall of the rate of interest, &c. For further information and for information regarding other Scholarships, Bursaries, and Prizes, &c., see pages 493 to 504.

(1.) *Latin*—Tacitus' "Germania," and translation from English into Latin prose.
(2.) *Greek*—Sophocles' "Œdipus Tyrennus," and Thucydides, Book I.
(3.) *Mathematics*—"Euclid," Books I.-VI.; Algebra and Elementary Trigonometry.
(4.) *Metaphysics*—Ferrier's "Lectures on Greek Philosophy."
(5.) *Moral Philosophy*—Sidgwick's "History of Ethics."
(6.) *Natural Philosophy*—Blaikie's "Elements of Dynamics," and Balfour Stewart's "Elementary Physics."
(7.) *Hebrew*—Davidson's Grammar and Exercises.
(8.) *Apologetics*—Flint's "Antitheistic Theories."
(9.) *Greek Testament*—Epistles to Romans and Hebrews.

9, 10, 11. *Grierson Bursaries*, No. VI., pages 496 and 497. Preferential candidates to lodge their applications with the *Clerk of Senatus* on or before 1st November 1896.

The subjects of examination for the Grierson Bursaries, if there be competition, will be :—

For the *first* year—

Same as for ordinary Competition Bursaries, except that *Hebrew*, *Apologetics*, and *Greek Testament* are omitted.

For the *second* year—

(1.) *Latin*—Lucretius, Book V., and Livy, Book II.
(2.) *Greek Testament*—Gospel of St Luke, and Pastoral Epistles.
(3.) *Hebrew*—Grammar; Joshua, chapters i.-x. inclusive; Psalms i.-viii. inclusive; Hebrew Prose Composition.
(4.) *Divinity*—The Trinity; Doctrine of Sin.
(5.) *Ecclesiastical History*—To 325 A.D.
(6.) *Biblical Criticism*—Charteris' "Christian Scriptures."

For the *third* year—

(1.) *Apologetic Theology*—Butler's "Analogy."
(2.) *Hebrew*—Judges, Amos, Psalms, Book iii.
(3.) *Ecclesiastical History*—To 325 A.D., and of Scotland, 1500 A.D. to 1600 A.D.
(4.) *Biblical Criticism*—"Canonicity," pp. 1-23; 102-113.

12, 13. *Two Simson Bursaries*, No. XV., pages 496 and 498.

14. *A Hepburn Prize*, £25 (which may be divided), for the best Essay on "The Westminster Confession," to be competed for by Students of second or subsequent year. The Essay not to exceed fifty pages 4to, and to be handed to Rev. Dr Scott, 16 Rothesay Place, Edinburgh, on or before 1st December 1896.

15. *Barty Memorial Prize*, of about £20, for Scholarship in Hebrew and Hellenistic Greek, is open to entrants to the Divinity Halls of the four Scottish Universities. Competitors to apply to J. W. Barty, Esq., Dunblane.

At the close of Session 1896-97, the following will be open for competition :—

1. *The Aitken Scholarship*, No. IV., page 502.
2. *The David Kidd Scholarship*, No. V., page 502.
3, 4. *Two Jeffrey Scholarships*, Nos. IX. and X., page 503.

The subjects of Examination are :—

Divinity—

1. The Foundations of Christian Belief.
2. The Doctrines of Providence, Predestination, and Sin.
3. Introduction and Part First of Newman Smyth's "Christian Ethics."

Hebrew and Semitic Languages—

1. Hebrew — Deuteronomy, i.-x., Micah, Nahum; Psalms, Book ii.; Composition.
2. Syriac—Nestle's Grammar, St John's Gospel, and Biblical Extracts in Roediger's Chrestomathy; Composition.
3. Socin's Grammar (new edition), *whole;* Bruennow's Chrestomathy, pp. 1-22; Composition.

5. *One King William Bursary*, No. IV., pages 496 and 497. The subjects of examination for this Bursary will be the work of the Session in the Classes of Divinity, Ecclesiastical History, Biblical Criticism, and Junior Hebrew.

6. *One Robert Hunter Bursary*, No. XIV., pages 496 and 497. The subjects of examination are the same as for the "King William Bursaries." These Bursaries cannot be held along with any other Bursary, Scholarship, or Fellowship in any Scottish University.

7. *The Mylne Bursary*, No. IX., pages 496 and 497. Examination as for "Robert Hunter" Bursary.

PRIZES.

1. The *Lord Rector's Prize*, No. II., page 359.
2. *The Gray Prizes*, No. VI., page 359.

William Dickson Travelling Fund, see page 356.

The attention of all Bursars in the Faculty of Divinity is particularly called to the following Regulation :—

"Each Bursar must present a Certificate, signed by the Dean, attesting his regular attendance on the proper Classes in the Faculty of Divinity on each occasion on which he applies to the Factor for a payment. Payments are made by the Factor for the University, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 14th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars, Scholars, and Fellows who desire to resign should at once announce this to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

M. C. TAYLOR, D.D.,
Dean of the Faculty of Divinity.

Faculty of Law.

Dean—Professor Sir LUDOVIC J. GRANT, Bart., B.A.

PROGRAMME OF CLASSES.

WINTER SESSION, 1896-97.

The Classes in the Faculty of Law will open on Thursday, 15th October, and will close on Friday, 19th March 1897.

Classes.	Days of Opening, and Hours of Lectures.	Professors and Lecturers.	Class Fees.[1]
Public Law[2] (*i.e.*, a half-course in Jurisprudence and a half-course in Public International Law)	15 Oct., 2 o'cl.	Prof. Sir Ludovic J. Grant, Bart.	£4 4[3]
Civil Law[2]	15 Oct., 4 ,,	Prof. Mackintosh	5 5[4]
Scots Law	15 Oct., 9 ,,	Prof. Rankine	5 5[4]
Constitutional Law and History[2]	15 Oct., 5 ,,	Prof. Kirkpatrick.	4 4[3]
Do., Honours[5]	13 Oct., 2 ,,	Prof. Kirkpatrick.	3 3
Conveyancing	15 Oct., 9 ,,	Prof. Wood	4 4
Political Economy & Mercantile Law[2]	13 Oct., 5 ,,	Prof. Nicholson	3 3[3]
Procedure and Evidence[6]	15 Oct., 5.30 ,,	J. J. Cook, LL.B.	2 2

SUMMER SESSION, 1897.

The Classes in the Faculty of Law will open as follows, and will close on Saturday, 17th July.

Classes.	Days of Opening, and Hours of Lectures.	Professors and Lecturers.	Class Fees.[1]
Civil Law	12 May, 9 o'clock	Prof. Mackintosh.	£5 5[4]
Scots Law	12 May, 9 ,,	Prof. Rankine	5 5[4]
Med. Jurisprudence	4 May, 10 ,,	Prof. Sir D. Maclagan	4 4
International Private Law[6]	12 May, 5 ,,	G. W. Burnet, M.A., B.L.	2 2

[1] For Matriculation Fees, see page 27. Second attendances: On £5, 5s. or £4, 4s. Courses, £3, 3s.; on £3, 3s. Courses, £2, 2s. On Half-Courses: First half, no reduction; second half, £1, 1s; on Procedure and Evidence and International Private Law, £1, 11s. 6d.; third or subsequent attendances on any Class, £1, 1s.

[2] Qualifying also for the degree of M.A.

[3] For a Half-Course, £2, 2s.

[4] This Fee is paid in Winter, and includes the Winter and Summer Sessions. Fee for Winter Session only, £4, 4s.; for Summer Session only, £2, 2s.

[5] Qualifies as Half-Course for Graduation in Law.

[6] Five shillings University entrance fee for non-matriculated Students.

Courses of Lectures.

1896-97.

I. CIVIL LAW.

PROFESSOR MACKINTOSH.

The full Course extends over a Winter and a Summer Session, covered by one fee of £5, 5s.

The Winter Course is the same as for Graduation in Arts; see Courses in Arts. The Summer Session is devoted to the doctrines of (1) Wills and Succession, (2) Obligations and Contract. The Contract of Sale will be dealt with in detail.

The Lectures are equally adapted for students qualifying for the legal profession in Scotland or England, or for service in India or the Colonies.

Text-Books.—The Institutes of Gaius and Justinian, and the Professor's "Roman Law of Sale."

The "Muirhead Prize" and the "Forensic Prize" are offered annually for competition.

II. SCOTS LAW.

PROFESSOR RANKINE, LL.D.

Students are recommended to make themselves familiar either with Erskine's "Principles" or his "Institutes" (edition by J. Badenach Nicolson, Esq., 1871). The nineteenth edition of the former work will be the text-book of the Class.

1. Sketch of the Literature of the Law of Scotland—the sources of the Law—the interpretation of Statutes.

2. Personal Relations—marriage and the modes of proving it—patrimonial effects of Marriage—rights of husband and wife—dissolution of Marriage—divorce—tutors and curators—minors—insane—parent and child—succession—heritable and moveable—wills—trusts.

3. Wrongs—personal injury—defamation—ownership of heritable property—rights and liabilities incident thereto—ownership of moveables—copyright—patents.

4. Obligations and Contracts—general requisites, constitu-

tion, and construction — partnership — joint-stock companies —factory and agency—sale—letting to hire—leases—carriers —shipping—insurance—bills of exchange—extinction of obligations—diligence—bankruptcy.

5. Parochial Law—burgh and county law—rates and taxes.

6. Criminal Law.

Summer Session.

The Lectures on Criminal Law, and part of the lectures on the above subjects, are delivered during the Summer Session.

III. CONVEYANCING.

PROFESSOR WOOD.

The Course embraces the following subjects :—

BRANCH FIRST—*Deeds in General.*

1. Requisites as to external form, and the solemnities of execution and authentication. 2. Deeds privileged as regards these solemnities. 3. Delivery and acceptance.

BRANCH SECOND—*Deeds relating to Feudal Rights.*

1. Sketch of the feudal system and its bearing on the existing state of heritable rights in Scotland. 2. The writs constituting a feudal estate. 3. Writs used in the voluntary transmission of lands. 4. Services and Destinations. 5. Settlements and Marriage Contracts, as relating to heritage. 6. Entails.

BRANCH THIRD—*Miscellaneous Rights relating to Heritable Estate.*

1. Servitudes. 2. Leases. 3. Adjudications and Inhibitions. 4. Sequestrations. 5. Trust Deeds for Creditors. 6. Rights in Security.

BRANCH FOURTH—*Miscellaneous Writs, relating mainly to Moveable Rights.*

1. Submissions. 2. Securities over moveables. 3. Cautioner's Writs. 4. Life Insurance Policies Writs. 5. Discharges. 6. Partnership and Company Deeds. 7. Factories. 8. Wills and Marriage Contracts.

IV. PUBLIC LAW.

PROFESSOR SIR LUDOVIC GRANT, BART.

Two Courses will be delivered during the Session 1896-7: (1) Forty Lectures on the Philosophy of Law; and (2) Forty Lectures on Public International Law.

1. The Course on the Philosophy of Law will begin on Tuesday, 13th October 1896, at two o'clock.

The Lectures will be delivered *four* days a week.

Books of Reference.—Green, Principles of Political Obligation. Ritchie, Natural Rights. Ahrens, Cours du Droit Naturel. Bluntschli, The Theory of the State. Lorimer, Institutes of Law. The Student's Austin. Holland, Jurisprudence. Markby, Elements of Law. Sir Henry Maine's Works. Pollock, History of Political Science. Seeley, Introduction to Political Science.

2. The Course on Public International Law will begin on 5th January 1897. The Class will meet *four* days a week.

(*a*) An Historical Retrospect. (*b*) Some Account of the Science and Literature of Public International Law.

Books of Reference.—Ward's Enquiry into the Foundation and History of the Law of Nations. Wheaton's History of the Laws of Nations; Introduction. Nys's Les Origines du Droit International. Westlake's International Law. Phillimore's International Law, Vol. I. Bryce, Holy Roman Empire. Pardessus, Us et Coutumes de la Mer.

(*c*) An examination of the sources and a critical exposition of the leading doctrines of Public International Law.

Books of Reference.—Hall, International Law. Wheaton, International Law. Lawrence, Principles of International Law. Woolsey, Introduction to the Study of International Law. Hertslet, Map of Europe by Treaty. Letters by Historicus. Pitt Cobbett, Select Cases.

V. CONSTITUTIONAL LAW AND HISTORY.

PROFESSOR KIRKPATRICK, LL.D.

These Lectures, qualifying for Graduation in Law and in Arts, are given in winter on Tuesdays, Wednesdays, Thursdays, and Fridays, at 5. Eight examinations and two essays during

the Session. Honours awarded for examinations and essays combined.

Subjects:—(1st Half) Constitutional History and Law of England; (2nd Half) Constitutions of America, France, Germany, Switzerland, &c.

Text-Books.—(1) For elementary purposes, Taswell Langmead's Constitutional History, and S. R. Gardiner's Student's History of England. For further study, Stubbs's Select Charters and English Constitutional History; Hallam's Middle Ages, Chap. viii.; Hallam's Constitutional History of England; Sir T. Erskine May's Constitutional History; English Constitution by W. Bagehot; Guizot's Lectures on Representative Government; R. Gneist's Self-Government in England, 3d edition, Berlin, 1871; Gneist's Geschichte und heutige Gestalt der Aemter, etc., in England, 2d edition. Berlin, 1866; Gneist's English Constitution, translated by P. A. Ashworth, London, 1886; and Blackstone's Commentaries, Book IV., of Public Rights.

(2) For elementary purposes, Thwaites' The Colonies and Hart's Formation of the Union (Epochs of American History), Johnston's History of the United States, Macy's Our Government. For further study, Bryce's American Commonwealth, Bancroft's History of the Constitution of the U.S.A., Winsor's History of the U.S.A., Adams and Cunningham's Swiss Confederation, Dareste's or Demombynes' Constitutions, Boutmy's Studies in Constitutional Law, &c.

The History Reading-Room (adjoining the Lecture Room) may be consulted by all members of the Class on Mondays and Fridays, from 11 to 1, and on Wednesdays, 12 to 2.

Auxiliary Course of Twenty Lectures on "The English Kingship," by Mr D. P. Heatley, the Professor's Assistant, on Wednesdays at 11 (free to all members of the Class).

VI. MEDICAL JURISPRUDENCE.

PROFESSOR SIR DOUGLAS MACLAGAN.

For Synopsis of this Course, *see* under Faculty of Medicine.

VII. COMMERCIAL AND POLITICAL ECONOMY AND MERCANTILE LAW.

For Synopsis of this Course, *see* under Faculty of Arts.

VIII. INTERNATIONAL PRIVATE LAW.

Lecturer—G. WARDLAW BURNET, M.A., B.L.

A Course of Forty Lectures on this subject will be given during the Summer Session on Tuesday, Wednesday, Thursday, and Friday in each week, at 5 P.M. Under Ordinances 39 and 40, attendance on these Lectures qualifies as a half-course for Graduation in Law. The subject is also included among those in which Intrants to the Faculty of Advocates may be examined, and the Lectures are therefore adapted for students qualifying for the Scottish Bar.

The Lectures will deal with (*a*) The purpose and scope of the study of International Private Law; (*b*) Its History and Literature; (*c*) Its general principles and their application in regard to (1) *Lex personalis*, the Rights of Persons as such, including the subjects of Nationality, Domicile, and Capacity, Guardianship, Legitimacy, Marriage, Divorce; (2) the Law of Succession; (3) Rights *in rem*—the Rights of persons over things—the Law of Property (*Lex rei sitae*); (4) Rights *in personam*—the Rights of persons over acts—the Law of Obligations *ex contractu* and *ex delicto*; (5) the Law of Bankruptcy; and (6) *Lex fori*, the Law of Process, including Jurisdiction, the Recognition of Foreign Judgments, and Procedure.

Examinations will be held on the subjects of the Lectures.

Books of Reference.—Rattigan's Private International Law, Guthrie's Savigny, Westlake's Private International Law, Gillespie's Bar, and Foote on Private International Jurisprudence.

PROCEDURE AND EVIDENCE.

Lecturer—J. J. COOK, LL.B.

This Course of Forty Lectures will describe the various Courts of Scotland, with the nature of their jurisdiction, the actions competent in each, and the details of the procedure, civil and criminal. It will also include the principles of the Law of Evidence.

Text-Books.—Mackay's "Manual" and "Practice of the Court of Session"; Coldstream's "Procedure in the Court of

Session"; Dove Wilson's "Sheriff-Court Practice in Civil Causes"; Macdonald's "Criminal Law"; Macdonald's "Criminal Procedure (Scotland) Act, 1887"; Dickson on "Evidence"; Kirkpatrick on "Evidence."

Candidates for Graduation who pass in Procedure and Evidence as an extra subject may have this fact recorded on their Diplomas.

Class Prize and Honours Lists.

SUMMER SESSION, 1895.

CIVIL LAW.

PRIZES.—1. William Burt, M.A., Edin. (*"Muirhead" Prize*); 2. Robert Gray; 3. G. Hart, M.A., Edin.

HONOURS.—4. W. Brotherston and T. Hart, M.A., Edin.—equal; 6. R. Carmichael; 7. Alastair Dallas, M.A., Edin., C. G. Kerr, and R. M. Mitchell—equal; 10. R. Berry.

JAMES MACKINTOSH, B.A., *Professor.*

SCOTS LAW.

1. James Adamson, M.A., Forfarshire; 2. Alexander G. Mitchell, Northumberland; and Adam Myron, Sutherland—equal; 4. David Stewart, Forfarshire (*Prizemen*); 5. Robert Scott Sharpe, Forfarshire; 6. M. R. M'Ewen, Renfrewshire; 7. Robert Robertson Black, Forfarshire; and Alexander Cowan, Kirkcudbrightshire—equal; 9. Grahame H. Wade, Stirlingshire; 10. D. A. Morrison, Renfrewshire; 11. T. P. Doughty, Berwickshire; 12. James D. Easson, Mid-Lothian; 13. James Paterson, Mid-Lothian; 14. John M'Murray, Wigtownshire; 15. William Annan, Forfarshire; 16. William J. Thom, Ayrshire; 17. Daniel S. Clark, Mid-Lothian; 18. John M'Allister, Dumfriesshire.

ESSAY PRIZE.—Robert Scott Sharpe and David Stewart—equal.

JOHN RANKINE, M.A., LL.D., *Professor.*

CONSTITUTIONAL LAW AND HISTORY.

PRIZE AND HONOURS LIST—EXAMINATIONS AND ESSAYS.—1. Charles S. Pennell; 2. Robert Gray; 3. Robert Berry; 4. Thomas Hart, M.A.; 5. Bessie B. Bird—(*Prizes*); 6. Dugald Maclean, M.A.; 7. John Smart; 8. Henry Lillie, M.A.; 9. James Dunlop, M.A.

HONOURABLE MENTION.—J. Barrower Guild, Robert Hendry, G. Claus Rankin, D. Robertson, Thomas S. Welsh.

JOHN KIRKPATRICK, LL.D., *Professor.*

MEDICAL JURISPRUDENCE.

First-Class Honours.—1. R. Montgomerie Samson (*Medallist*); 2. William Burt; 3. J. M. Macmillan.

Second-Class Honours.—4. Malcolm N. MacInnes; 5. R. Macgregor Mitchell; 6. William Mitchell; 7. John Mackintosh; 8. W. Ogilvy; 9. David Provan; 10. A. E. P. Gardner and Charles M. Gray—equal; 12. R. C. Henderson.

R. D. Melville present at one examination, and obtained 67 per cent.

DOUGLAS MACLAGAN, Kt., M.D., *Professor.*

WINTER SESSION, 1895-96.

PUBLIC LAW.

1. W. Burt, R. Gray, and J. A. Inglis—equal; 4. D. Maclean (*Prizemen*).

Honours.—5. J. Dunlop and D. A. Milne—equal; 7. J. Mackintosh; 8. R. Macgregor Mitchell; 9. A. B. Barty; 10. O. G. Bell; 11. J. D. Millar.

Essay Prize.—J. A. Inglis.

Honourable Mention.—D. Maclean.

L. J. GRANT, Bart., B.A., *Professor.*

CIVIL LAW.

1. J. A. Inglis, B.A. Oxon.; 2. M. N. M'Innes, M.A. Edin.; and D. Robertson (*Prizemen*)—equal.

Honours.—4. C. C. Watson, M.A., Edin.; 5. O. F. Lumsden; 6. E. F. Gibson, M.A., Edin.; J. M. Macmillan, M.A., Edin.; G. C. Rankin; and T. S. Welsh—equal; 10. D. Smith Clark; 11. D. Connel, M.A., Edin.; and J. B. Craik, B.A. Oxon—equal; 13. Norris Mackay, B.A. Cantab.

JAMES MACKINTOSH, B.A., *Professor.*

CONSTITUTIONAL LAW AND HISTORY.

Full Course.

Prizes and Honours.—1. William Burt, M.A.; 2. John M'Farlane; 3. J. Melrose Macmillan and John Smart—equal; 5. W. Keith Aikman and J. B. Ballingall, M.A.—equal; 7. J. Dan Easson.

Half Course.

Prizes and Honours.—1. Bessie B. Bird; 2 J. Harrower Guild; 3. Alexander Williamson, M.A.

J. KIRKPATRICK, M.A., LL.D., *Professor.*

SCOTS LAW.

1. M. S. Shaw, Perthshire; 2. Robert D. Phillip, Forfarshire; 3. Christopher J. Bisset, Forfarshire, and Archibald G. Reid, Fife—

equal; 5. Ernest T. Skae, Stirlingshire; 6. David Paterson, Dumfriesshire; 7. James Macdonald, Argyllshire; 8. William Brotherston, jun., Mid-Lothian, and Robert D. Gray, Lanarkshire —equal (*Prizemen*); 10. A. H. Buglass, West Lothian; 11. David Ogilvy Young; 12. Thomas Hart, M.A., Mid-Lothian; 13. James Shields, Mid-Lothian; 14. Alexander Fowler Hay Roxburghshire; 15. Charles Anderson, Aberdeenshire; 16. William Ramage, Mid-Lothian; 17. David Porter, Forfarshire; 18. Alexander F. Fraser, Lanarkshire; 19. Roderick Mackenzie, Ross-shire; 20. R. W. Smart, Perthshire; 21. Donald M'Laren, Perthshire; 22. Andrew D. Crichton, Forfarshire; 23. R. Montgomerie Samson, Ayrshire; 24. Peter A. MacBrayne, Renfrewshire; 25. A. H. Milne, Morayshire.

JOHN RANKINE, M.A., LL.D., *Professor.*

CONVEYANCING.

1. John M'Murray, Wigtown; 2. T. E. Young, Edinburgh; 3. O. J Poole, Surrey; 4. Adam Myron, Sutherland; 5. Thomas Crow, Edinburgh; 6. G. H. Wade, Stirling; 7. A. G. Mitchell, Northumberland; 8. Alexander Cowan, Kirkcudbright (*Prizemen*); 9. G. L. Moffat, Dumfries, and James Adamson, Forfar—equal; 11. R. Robertson Black, Forfar, and Matthew R. M'Ewen, Renfrew —equal; 13. J. D. Easson, Edinburgh; 14. D. A. Morrison, Renfrew; 15. James Ritchie, Dumfries; 16. R. S. Sharpe, Forfar; 17. James Paterson, Lanark; 18. Robert Macfie, Edinburgh; 19. William Yeaman, Forfar, and J. C. Stevens, Perth—equal; 21. David Stewart, Forfar; 22. W. J. Thom, Ayr; 23. J. S. Saunders, Edinburgh; 24. T. D. Murray, Fife; 25. Robert Taylor, Linlithgow, and R. B. White, Fife—equal; 27. J. S. Gordon, Forfar; 28. J. M'Allister, Dumfries; 29. John Stewart, Perth; 30. J. Jardine, Dumfries, and Hugh Forbes, Stirling—equal; 32. W. G. D. Simpson, Fife; 33. R. A. Smith, Forfar; 34. T. C. Halliburton, Roxburgh; 35. G. S. M'Crindle, Edinburgh; 36. I. F. Edgar, Dumfries; 37. W. Scorgie, Aberdeen; 38. T. S. Somerville, Lanark; 39. Thomas Gorrie, Fife; 40. Angus Mackenzie, Perth; 41. W. Anderson, Fife; 42. T. P. Doughty, Berwickshire; 43. James Brown, Wigtown.

J. P. WOOD, W.S., *Professor.*

INTERNATIONAL PRIVATE LAW.

PRIZE.—Alexander Williamson, M.A.

GEO. WARDLAW BURNET, M.A., B.L., *Lecturer.*

CIVIL AND CRIMINAL PROCEDURE AND THE LAW OF EVIDENCE.

COLDSTREAM MEDAL.—Alexander H. Buglass, Linlithgow.

J. J. COOK, M.A., LL.B., *Lecturer.*

Regulations for Graduation in Law.

Regulations for those who began the Study of Law, with a view to Graduation, before 1st October 1894, see CALENDAR *for 1895-96 or previous* CALENDARS.

Two Degrees in Law are conferred on Examination, viz., Bachelor of Law (B.L.) and Bachelor of Laws (LL.B.). Either Degree admits to the profession of Law Agent, provided the Candidate has included Scots Law and Conveyancing among his Graduation subjects, and has passed an Examination in the Practice of the Courts under the Law Agents Act.

The Degree of LL.B. (if the Candidate has been examined in Civil Law, Philosophy of Law, International Law—Public or Private, Constitutional Law and History, Medical Jurisprudence, Scots Law—Civil and Criminal, including Procedure, and Conveyancing admits to the profession of Advocate.

Two Law Graduation Examinations are held annually, the first beginning on the last Monday in October, and the second on the third Monday in March.

I. REGULATIONS FOR BACHELOR OF LAWS (LL.B.).

I. No one is admitted to examination as a Candidate for the Degree of Bachelor of Laws (LL.B.) unless he be a Graduate in Arts of one of the Universities of the United Kingdom; or of any Foreign or Colonial University specially recognised for the purpose by the University Court.[1]

II. The course of study in Law for the Degree of Bachelor of Laws includes the following subjects:—[2]

(1) Jurisprudence, General or Comparative, during a course of not less than forty lectures.

(2) The Law of Nations, or Public International Law, during a course of not less than forty lectures.

(3) Civil Law, during a course of not less than eighty lectures.

(4) Law of Scotland, or Law of England, during a course of not less than eighty lectures.

(5) Constitutional Law and History, during a course of not less than eighty lectures.

(6) Conveyancing, during a course of not less than eighty lectures; or Political Economy, or Mercantile Law, during a course of not less than eighty lectures.

(7) Any two of the following subjects, namely:—International Private Law, Political Economy, Administrative Law, and Forensic Medicine; in each case during a course of not less than forty lectures.

[1] The following Degrees have been recognised in terms of this Section: B.A. of New Zealand University; B.A. of Cape of Good Hope University; B.A. of Dalhousie University, Halifax, Nova Scotia; B.A. of Michigan University.

[2] For names of authorised extra-academical lecturers, *see* under Faculty of Medicine.

III. (1) The course of study necessary for the Degree of Bachelor of Laws extends over three academical years, one of which at least must be spent in the University in which the Candidate intends to graduate, the other two may be spent in any other University or School of Law, specially recognised by the University Court.[1]

(2) No Candidate for a Degree is deemed to have attended a class as part of the course of study necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

IV. Candidates must undergo examination in the subjects prescribed in Section II. hereof; and they must pass at one examination in at least two of these subjects. Before presenting themselves in any subject the Candidates must have attended the requisite course of instruction in such subject. Candidates who have passed an examination for another degree in any of the said prescribed subjects in the same University may be exempted from examination in such subject or subjects, provided that the examiners are satisfied that the previous examination in such subject or subjects has been passed on a sufficiently high standard.

V. Every Candidate for the Degree of Bachelor of Laws is examined both orally and in writing on each of the subjects in the course of study above prescribed, in which he presents himself for examination.

VI. (1) Distinction may be awarded to Candidates who have displayed exceptional merit in their examinations.

(2) For the Degree of Bachelor of Laws a diploma is given, setting forth the subjects in which the Candidate has passed, and the distinction (if any) he has attained.

Candidates for Examination or Graduation must matriculate for the year.

II. BACHELOR OF LAW (B.L.).

I. No one is admitted to examination as a Candidate for the Degree of Bachelor of Law (B.L.) unless he be a Graduate in Arts of one of the Universities of the United Kingdom, or of any Foreign or Colonial University specially recognised for the purpose by the University Court; or until he has passed—*A.* The Preliminary Examination in the Faculty of Arts, or its equivalent, and *B.* An examination in one of the Scottish Universities, to be conducted by the Examiners in Arts, in the following subjects, on the Standard of Examination for the Ordinary Degree of Master of Arts:—

(1) Logic and Psychology; or, in the option of the Candidate, Moral Philosophy. (2) Latin. (3) One additional Arts subject, not being one of those which belong also to the Faculty of Law.

And he must have studied at least one of these subjects in a full course in a Scottish University, or an equivalent course in another University approved by the University Court.

[1] Universities, &c., recognised in terms of this Section: Oxford, Cambridge, Dublin, and the four Inns of Court, London, provided the conditions laid down by Section II. of the Ordinance be complied with.

II. The course of study in Law necessary for the Degree of Bachelor of Law must include the following subjects:—

1. Civil Law, during a course of not less than eighty lectures; or a half-course in Civil Law where in any University a full course is not available; provided that in the latter case, Candidates who are not already graduates in Arts are required to take in addition a course in such subject in Arts as may be sanctioned by the Senatus Academicus, or a half-course in one or other of the following branches of Law:—(*a*) Jurisprudence, General or Comparative. (*b*) The Law of Nations, or Public International Law. (*c*) Constitutional Law and History. (*d*) International Private Law. (*e*) Mercantile Law. (*f*) Administrative Law.

2. Law of Scotland, during a course of not less than eighty lectures.

3. Conveyancing, during a course of not less than eighty lectures.

4. Forensic Medicine, during a course of not less than forty meetings of the class; or, in the option of the Candidate, a half-course in one of the branches of Law specified in sub-section 1 of this section, if not already taken.

III. (1) The course of study in Law necessary for the Degree of Bachelor of Law extends over two Academical years.

(2) No Candidate for a Degree is deemed to have attended a class as part of the course of study necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

(3) The Candidate may prosecute his studies during the prescribed two years in one Scottish University, or in different Scottish Universities, or in a Scottish University and a University or School of Law specially recognised by the University Court; but one at least of these years must be spent, and all the examinations in the subjects mentioned in the preceding section must be passed, at the University in which he intends to graduate.

IV. The Candidate for the Degree of Bachelor of Law must undergo examination and pass in the four or more subjects selected by him; but he may present himself for examination in one subject or group of subjects at a time, provided that he has completed the course of study for such subject or group of subjects, and provided also that in that case a higher standard of proficiency shall be exacted.

V. Every Candidate for the Degree of Bachelor of Law is examined, both orally and in writing, on each of the subjects in the course of study above prescribed, in which he presents himself for examination.

VI. (1) Distinction may be awarded to Candidates who have displayed exceptional merit in their examinations.

(2) For the Degree of Bachelor of Law a diploma is given, setting forth the subjects in which the Candidate has passed, and the distinction (if any) he has attained.

Candidates for Examination or Graduation must matriculate for the year.

EXAMINATIONS.

I. Preliminary Examinations for B.L.

A.—For outlines of subjects on the M.A. Preliminary Standard, see page 112, and for Time Table of Examinations, see page 132.

B.—For outlines of subjects on Standard of Ordinary Degree of M.A., see page 138, and for Time Table of Examinations, see page 136.

II. Law Examinations (for Degrees of LL.B. and B.L.).

Subjects for October 1896 (*and till further notice*).[1]

In Public Law the subjects will be *The Philosophy of Law* and *Public International Law*. The books recommended for study are mentioned in the Synopsis of the Professor's Lectures.

In Civil Law the examination will be on the History of the Law, and on its Principles as explained in the Institutes of Gaius and Justinian. Candidates for LL.B. will also be examined on Books xviii., tit. i. (*De contrahenda emptione*) and xix., tit. i. (*de actionibus empti venditi*) of the Digest. The works of Prof. Muirhead are recommended.

In Constitutional Law and History the subjects will be—(*a*) Constitutional History and Law of England, down to the first Reform Act (Text-books, the works of Stubbs, Hallam, and May); (*b*) the Constitutions of the U.S. of America, of France, Germany, and Switzerland (Text-books, Bancroft, Bryce, Adam and Cunningham, Dareste's or Demombyne's Constitutions). See also Synopsis of Lectures.

In the Law of Scotland the subject will be the Municipal Civil and Criminal Law. The works of Mr Erskine and Mr G. J. Bell, and Macdonald's "Criminal Law," in the latest editions, are recommended to Candidates.

In Conveyancing the subject of examination will be—(1) Irredeemable Heritable Rights, including Entails; (2) Leases.

In Medical Jurisprudence the subjects will be—(1) Identity of the Living; (2) Criminal Abortion; (3) Wounds and other External Injuries, including Blood Stains; (4) Poisoning by Arsenic; (5) Inheritance and Legitimacy.

In Political Economy the examination will be on the subjects treated of in Mr J. S. Mill's "Principles of Political Economy." Candidates must also show some knowledge of the works of the recent writers mentioned in the Synopsis of the Professor's Lectures.

In International Private Law Candidates will be examined on the subjects mentioned in the Synopsis (v. p. 512), as dealt with in the Lectures and in Guthrie's Savigny.

Procedure and Evidence.—Candidates for a Law Degree may be examined in this subject also, and have the fact recorded on their diplomas. Text-books, see Synopsis of Lectures.

[1] Examination papers will be set in the other subjects prescribed by the Regulations if required.

FEES.

1. Preliminary Examination for B.L.

For each appearance, ... £0 10 6

2. Law Examinations for LL.B. and B.L.

The fee payable for LL.B. is £6 6 0

or

If the Examination be taken at two or more periods—

For the First, ... £3 3 0

For the Second, ... 3 3 0

The fee payable for B.L. is £5 5 0

or

If the Examination be taken at two or more periods—

For the First, ... £3 3 0

For the Second, ... 2 2 0

Candidates who fail to pass in any of the LL.B. or B.L. subjects pay a fee of 10s. 6d. for each subject in which they are re-admitted to Examination.

Fee for registration as a member of the General Council (if not already registered) £1.

DATES OF ENTERING FOR EXAMINATIONS, ETC., AND FOR PAYMENT OF FEES.[1]

Candidates may pay the fees personally or transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts.

I. Preliminary Examination for B.L.

Candidates for Examination may obtain Schedules at the Matriculation Office, University (Old) Buildings, which must be completed and lodged, with the relative fees, not later than 18th September 1896 and 1st March 1897, for the autumn and spring Examinations respectively.

A.—On the M.A. Preliminary Examination Standard.

1896.

Sept. 18, Fri. Names, &c., to be given in and fees paid, *on or before* this date.

,, 25, ,, Italian—2-5.

,, 26, Sat. English—9-11, 12-2; Lower Greek, 3-6.

,, 28, Mon. Lower Latin—9-12; Lower Mathematics, 2-5.

,, 29, Tu. Higher Latin—9-11, 12-2; French, 1st Paper, 3-4.30.

,, 30, Wed. Higher Greek—9-11, 12-2; German, 1st Paper, 3-4.30.

October 1, Th. Higher Mathematics—9-11, 12-2; French, 2nd Paper, 3-5.

,, 2, Fri. German—2nd Paper, 9-11; Dynamics, 1-4.

[1] If names are not entered, and fees are not paid, on or before the stated dates, a late entry fee of ten shillings must be paid before the Candidate can be admitted to examination.

1897.

March 1, Mon. Names, &c., to be given in and fees paid *on or before* this date.
,, 26, Fri. Italian—2-5.
,, 27, Sat. English—9-11, 12-2; Lower Greek, 3-6.
,, 29, Mon. Lower Latin—9-12; Lower Mathematics, 2-5.
,, 30, Tu. Higher Latin—9-11, 12-2; French, 1st Paper, 3-4.30.
,, 31, Wed. Higher Greek—9-11, 12-2; German, 1st Paper, 3-4.30.
April 1, Th. Higher Mathematics—9-11, 12-2; French, 2nd Paper, 3-5.
,, 2, Fri. German—2nd Paper, 9-11; Dynamics, 1-4.

B.—For Dates of Examinations and Outline of Subjects on Standard of Ordinary Degree of M.A., *see Regulations for Degrees in Arts.*

II. Law Examinations for LL.B. and B.L.[1]

1896.

October 19, Mon. Names to be given in, certificates shown, and fees paid, *on or before* this date.
,, 26, ,, Scots Law—9-1; Constitutional Law and History, 2-4.
,, 27, Tu. Civil Law—9-1; Constitutional Law and History, 2-4.
,, 28, Wed. Conveyancing—9-1; Political Economy, 9-11; 11.30-1.30; Medical Jurisprudence, 2-4.
,, 29, Th. Public Law—9-11, 12-2.
,, 30, Fri. International Private Law, 9-11; Procedure and Evidence, 12-4.
Nov. 2, Mon. Oral Examinations begin.

1897.

March 8, Mon. Names to be given in, certificates shown, and fees paid, *on or before* this date.
,, 15, ,, Scots Law—9-1; Constitutional Law and History, 2-4.
,, 16, Tu. Civil Law—9-1; Constitutional Law and History, 2-4.
,, 17, Wed. Conveyancing, 9-1; Political Economy, 9-11; 11.30-1.30; Medical Jurisprudence, 2-4.
,, 18, Th. Public Law, 9-11, 12-2.
,, 19, Fri. International Private Law, 9-11; Procedure and Evidence, 12-4.
,, 22, Mon. Oral Examinations begin.

Graduation Ceremonials.

April 10, Sat.
August 2, Mon. } Names to be entered at least ten days previously.

[1] See footnote, page 520.

Examination Papers for Degrees in Law.

EXAMINATION PAPERS FOR LL.B. AND B.L.

SCOTS LAW.

MONDAY, 16*th March* 1896.—9 *to* 1 *o'clock.*

(*Three Questions only in each group to be answered.*)

I.

1. What are the powers of a minor who has no curators, and in what ways may a minor who has curators bind himself when acting without their consent?
2. What is the order of intestate succession in heritage?
3. State the rules affecting *donatio inter virum et uxorem.*
4. Expound briefly the law of vesting of legacies.

II.

1. State generally how servitudes are constituted and how they are extinguished?
2. Explain briefly the law of support.
3. On whom lies the burden of repair of (*a*) houses and (*b*) farm fences, as between landlord and tenant?
4. Explain the following, with reference to reparation:—*Spondet peritiam artis: volenti non fit injuria;* every dog is entitled to one worry; *vis major.*

III.

1. In what ways can a person, receiving a share of the profits of a business, show that he is not a partner in the business?
2. What are the remedies of the parties respectively when (1) the buyer wrongfully refuses to accept, and (2) the seller wrongfully refuses to deliver, the goods?
3. In Marine Insurance, what is constructive total loss? and how is indemnity obtained?
4. In what circumstances may a Joint Stock Company be wound up (1) voluntarily, and (2) by the Court?

IV.

1. How far is a bill of lading evidence of the quantity of goods shipped? What are the rights of an indorsee of a bill of lading?

2. What are the provisions of the Act of 1696, c. 5, with regard to preferences granted to creditors? Give three classes of transactions which are held not to fall under the operation of the Act.

3. Explain the sexennial prescription.

4. What subjects are liable to ordinary poinding.

CONSTITUTIONAL LAW AND HISTORY.

FIRST PAPER.

MONDAY, 16*th March* 1896.—2 *to* 4 *o'clock.*

(*Five Questions at most to be answered.*)

1. Define the province of Constitutional Law and History. What do you understand by Political Science?

2. (*a*) Sketch the History and (*b*) describe the chief constitutional provisions of the Great Charter.

3. Trace in outline the growth of representative government from Anglo-Saxon times to 1295; *or*, describe and discuss the legislation of Edward I.

4. Sketch the history and the proceedings of the Good Parliament (1376).

5. What were the powers and privileges of the House of Commons in the reign of Henry V.?

6. Describe briefly Wycliffe's place in Constitutional History.

7. Trace Wycliffe's influence from his death down to the time of Luther.

8. Why may Henry VIII. be described as a very constitutional monarch? Illustrate.

9. Sketch very briefly the history of the Reformation in England, and show its political bearings.

10. "Queen Elizabeth was an absolute sovereign." Criticize and discuss.

11. Give the substance, and state the causes and effects, of Queen Elizabeth's legislation against the Roman Catholics—*or*, of that against the Puritans.

12. Explain and discuss any *four* of:—(*a*) De minoribus rebus principes consultant, de majoribus omnes. (*b*) Swa swythe nearwelice he hit lett ut aspyrian thæt næs an ælpig hide landes . . . thæt næs gesæt on his gewrite. (*c*) Nullum scutagium ponatur nisi per commune consilium regni. (*d*) Nullus liber homo capiatur vel imprisonetur . . . nisi per legale judicium parium suorum vel per legem terræ. (*e*) Quod omnes tangit ab omnibus comprobetur. (*f*) Temporal lords may take away the godes fro the Cherch whan the persones trespasin. (*g*) The eld dampned opinion of Berengari. (*h*) Rustici statuerunt omnes curiarum rotulos et munimenta vetera dare flammis. (*i*) Il Cardinale Eboracense cominciò a persuadere il Re che, ripudiata la prima moglie, contrahesse un altro matrimonio.

SECOND PAPER.

TUESDAY, 17*th March* 1896.—2 *to* 5 *o'clock.*

(*Five Questions only to be answered.*)

1. Describe, discuss, and illustrate the Kingship of the Stuarts.

2. State shortly the history and the substance of (*a*) The Apology, (*b*) The Protestation, (*c*) The Petition of Right, and (*d*) The Grand Remonstrance.

3. Summarize and explain the "religious tests" legislation of Charles II.

4. Define and discuss the Monarchy of 1689. How far is it rightly termed "the new monarchy"?

5. Trace the growth of the Cabinet System. Explain its working.

6. Sketch the history of one of the thirteen North American Colonies down to 1763.

7. State shortly the causes of the American Revolution (1764-76).

8. What are the chief provisions of the Constitution of the U.S.A.?

9. Discuss the peculiarities of the U.S.A. form of government, and compare it with other forms.

10. "Government by the King's Friends": explain and criticise.

11. Give an outline of the history of Religious Toleration in England down to 1830, *or*, of that of Parliamentary Reform down to 1832.

12. Write a brief account of the present Constitution of *one* of—France, Switzerland, Prussia, German Empire, Austrian-Hungarian Empire.

13. State and discuss the merits or demerits, peculiarities or anomalies, of any one of the constitutions of the countries just named.

CIVIL LAW.

TUESDAY, 17*th March* 1896.—9 *to* 1 *o'clock.*

A.—HISTORY.

(*All candidates are expected to answer* SIX *Questions in this group.*)

1. What do you consider the most fruitful methods of investigation into Early Roman Law?

2. What is known regarding (1) the mode of appointment, and (2) the judicial attributes of the kings?

3. Are there any indications that the system of private property in land was of gradual development at Rome?

4. Describe the origin and the constitutional position of the tribunate of the plebs.

5. What were the modes in which marriage *cum conventione in manum* could be created?

6. Discuss the nature of the Pontifical "Interpretation," and its bearing on the development of the law.

7. Trace the history and effects of the system of *Responsa* under Imperial sanction.

8. "The *Corpus Juris* is not a Code in our sense of the

word." Explain this statement, and remark on the arrangement of Justinian's law-books.

B.—INSTITUTES.

(*The first Question must be answered by all candidates; candidates for M.A. or B.L. should attempt* SEVEN, *and candidates for LL.B.* FIVE *of the remaining Questions.*)

1. Translate and explain:—

(*a*) Si quis tutor copiam sui non faciat, ut alimenta pupillo decernantur, cavetur . . . ut in possessionem bonorum ejus pupillus mittatur: et quae mora deteriora futura sunt, dato curatore distrahi jubentur. Ergo ut suspectus removeri poterit, qui non praestat alimenta.

(*b*) Interdum etiam sine traditione nuda voluntas sufficit domini ad rem transferendam.

(*c*) Definiverunt veteres, ex quibus causis infitiando lis crescit, ex his causis non debitum solutum repeti non posse, veluti ex lege Aquilia, item ex legato.

(*d*) Furti actio . . . tantum ad poenae persecutionem pertinet: nam ipsius rei persecutionem extrinsecus habet dominus, quam aut vindicando aut condicendo potest auferre.

2. Note the leading differences in the law of manumission of slaves as stated by Gaius and Justinian.

3. What was *minima capitis deminutio*? In what cases did it occur, and with what results?

4. Explain *occupatio* as a title to Property, and give the leading examples of its application.

5. Over what subjects, and in what ways, might a Usufruct be created? What were the rights of the usufructuary?

6. What were the different forms in which a legacy could be validly bequeathed at different periods?

7. What persons were called to the succession *unde liberi*?

8. State the leading rules of law regarding *fidejussio*.

9. Explain the working of *acceptilatio*, *novatio*, and *confusio*.

10. Illustrate by examples the nature of an obligation *quasi ex delicto*.

C.—DIGEST XVIII. 1 AND XIX. 1.

(*To be answered by Candidates for LL.B.*).

1. "Quod vendidi non aliter fit accipientis, quam si aut pretium nobis solutum sit aut satis eo nomine factum vel etiam fidem habuerimus emptori sine ulla satisfactione."

(*a*) Explain this rule historically.

(*b*) In what other ways were the interests of an unpaid seller legally secured?

2. Translate the following passages, and show their bearing on the theory of Error and of Agency respectively:—

(1) Labeo libro posteriorum scribit, si vestimenta interpola quis pro novis emerit, Trebatio placere ita emptori praestandum quod interest, si ignorans interpola emerit. quam sententiam et Pomponius probat, in qua et Julianus est, qui ait, si quidem ignorabat venditor, ipsius rei nomine teneri, si sciebat, etiam damni quod ex eo contingit: quemadmodum si vas aurichalcum pro auro vendidisset ignorans, tenetur ut aurum quod vendidit praestet.

(2) Si procurator vendiderit et caverit emptori, quaeritur an domino vel adversus dominum actio dari debeat. et Papinianus libro tertio responsorum putat cum domino ex empto agi posse utili actione ad exemplum institoriae actionis, si modo rem vendendam mandavit. ergo et per contrarium dicendum est utilem ex empto actionem domino competere.

CONVEYANCING.

WEDNESDAY, 18*th March* 1896.—9 *to* 1 *o'clock.*

(*Any* TWELVE *Questions to be answered.*)

1. Sketch the Instrument of Sasine in feudal subjects in the form in use before the Statutory changes.

2. Discuss the Disposition with double manner of holding in the old form, stating the essential clauses thereof, with their uses.

3. Explain the absence from the modern form of Disposition of the following Clauses:—(*a*) the obligation to

infeft, (*b*) the procuratory of resignation, (*c*) the precept of Sasine.

4. Deal historically and practically with the warrant of registration.

5. Explain the theory of Burgage tenure, and mention the method by which Sasine was given to a singular successor in Burgage subjects.

6. State the provisions of the Conveyancing Act, 1874, as to the redemption and commutation of casualties.

7. Comment on the case of *Dick Lauder* v. *Thornton*.

8. Discuss the change made on the long positive prescription by the Conveyancing Act.

9. Explain the peculiarities of the form of Conveyance provided by the Lands Clauses Act, and its effects.

10. Treat historically the subject of *mortis causa* deeds relating to heritage.

11. Explain the enactment of the Consolidation Act, 1868, on this subject.

12. Trace the uses and effect of a decree of general service: (*a*) as conferring a right; (*b*) as a step in completion of title; and (*c*) as involving a liability.

13. What are the modern essentials of a Deed of Strict Entail, as to its contents and the necessary further steps.

14. Explain the difference between old and new Entails as to date disentailing.

15. Discuss the position of the law as to the consents of heirs (and dispensing with consents) in applications under the Entail Acts.

MEDICAL JURISPRUDENCE.

WEDNESDAY, 18*th March* 1896.—2 *to* 4 *o'clock.*

1. What are the characteristic symptoms of poisoning by Deadly Nightshade? (Atropa Belladonna).

2. When a bullet has traversed the body or a limb, what differences may exist between the wound of entrance and the wound of exit?

3. What is the average length and weight of a healthy new-born male child?

4. What is meant by choke damp? under what circumstances does it occur?

5. What is the relation of intoxication to responsibility for crime?

PUBLIC LAW.

First Paper.—Philosophy of Law.

Thursday, 19*th March* 1896.—9 *to* 11 *o'clock.*

(*Not more than* six *Questions to be answered.*)

1. Distinguish and describe the various "Methods of Jurisprudence."

2. In what successive forms did Ancient Law manifest itself?

3. "Civitas nihil aliud est quam hominum multitudo, aliquo societatis vinculo colligata." Do you consider that to be an adequate definition of the State?

4. The influence of Stoicism upon Roman Law.

5. Discuss Austin's conception of Sovereignty.

6. Into what elements may a legal Right be analysed? How may legal Rights be classified.

7. Give some account of the conception of "Natural Law" in the 15th century A.D.

8. What is the philosophical basis of the Right of Bequest?

9. Distinguish between Positive Law and Positive Morality?

10. Examine the theory of a Social Compact.

11. For an Essay:—The limits of State interference.

Second Paper.—Public International Law.

Thursday, 19*th March* 1896.—12 *to* 2 *o'clock.*

(*Not more than* six *Questions to be answered. One of the First Three must be answered*).

1. Compare and contrast International, with Municipal, Law.

2. Discuss the bearing of the Reformation upon International Law.

3. Give some account of the following:—Isidore of Seville; Honoré Bonet; Franciscus a Victoria; Gentilis; Selden.

4. Describe, with illustrations, the varieties of Mi-souvrain States.

5. What is Intervention? When may it be legally resorted to?

6. Over whom do States possess extra-territorial jurisdictional powers?

7. To what extent are seas still *maria clausa*?

8. "War is not a relation of man to man, but of State to State." Discuss.

9. State and illustrate the law relating to transfers of property by enemy-subjects to neutrals.

10. What are the liabilities of State-property in time of War.

11. May Guerilla bands be lawfully employed?

12. State the Law of Blockade.

13. What is the Doctrine of Occasional Contraband?

14. Write an account of any two of the following:—First Armed Neutrality: Silesian Loan: Alabama Claim: Monroe Doctrine; Affair of the Trent.

POLITICAL ECONOMY.

(*For papers, see under Faculty of Arts.*)

Graduates in Law.[1]

DEGREE OF LL.B., 1889-1896.

1889.

David Anderson, M.A.
Claud Patrick Boswell, M.A.
Archibald Brown Campbell, M.A.
*Andrew Henderson Briggs Constable, M.A.
*Alistair Davidson, M.A.
*Matthew Robin Greenlees, M.A.
James Arthur Hope, M.A.
*William Hunter, M.A.
*Robert Bird Kerr, M.A.
Francis Kinloch, B.A.

[1] The names of all the Graduates in Law from the institution of the Degrees to 1888 will be found in the List of Graduates of the University, published in 1889, pp. 125-127. See also previous Calendars.

* Passed with distinction. "Distinction" was instituted in October 1885. Several of the Graduates of 1885-88 passed part of their Examinations before any record of distinction was preserved.

*George Fleming Mathers, M.A.
*John Hepburn Millar, M.A.
*Charles David Murray, M.A.
*Coventry Dick Peddie, M.A.
John Ritchie, M.A.
*Hamish Hay Stuart, M.A.
Arthur Moodie Thomas, M.A.
*Alexander Thomson, M.A.

1890.

*Duncan Mearns Abel, M.A.
*James Roberton Christie, M.A., LL.B. (Glasg.).
*William Scott Currie, M.A.
Edmund John Gunn, M.A.
Neil James Kennedy, B.A.
William James Kippen, B.A.
Lawrence M'Laren, M.A.
John Liddell Officer, M.A.
Alexander David Russell, M.A.
*William Thomson, M.A.

1891.

Andrew Brown, M.A.
Charles Walker Bruce, M.A.
Robt. Jeffrey Cunningham, M.A.
James Wright Forbes, M.A.
Henry William Gibson, M.A.
Alexander Gray, M.A.
William Gray, M.A.
*James Mercer Irvine, M.A., B.Sc.
*Erskine Dawson Jamieson, M.A.
*Thomas Johnston, M.A.
Robt. Carmichael Malcolm, M.A.
*Thomas Brash Morison, M.A.
C. Morrison, M.A.
*Andrew Fleming Smith, M.A.
James Robert Earl Monteith Smith, M.A.
Michael Smith, M.A.
*Robert Macaulay Smith, M.A.
Frederick Mills Spankie, M.A.
Alex. Arthur Granger-Stewart, M.A.
*Robert Moir Williamson, M.A.
John Buchanan Young, M.A.

1892.

James Barty, M.A.
William Brown, M.A.
*John Sproat Taylor Cameron, M.A.
*William Chree, M.A.
John Marr Davidson, M.A.
*James Grant, M.A.
Augustus Wallace M'Gregor, M.A.
Thomas John Millar, M.A.
Alexander John Raeburn, M.A.

1893.

George Haskell Boyd, M.A.
Thomas Sanderson Hepburn Burns, M.A.
*William Findlay, M.A.
Louis Carr Hallard, M.A.
*William Ingram, M.A., D.Sc.
*Robert Munro, M.A.
William Dormond Munro, M.A.
*Alexander Blairford Smith, M.A.
Thomas Callander Wade, M.A.
John Peregrine Robertson White, M.A.

1894.

*Alexander Brown, M.A.
Robert Smith Craig, M.A.
William Graham, M.A.
Ian MacIntyre, M.A.
*James M'Robie, M.A.
David Maxwell, M.A.
George Morton, M.A.
John Purves Smith, M.A.
Frederick James Thomson, M.A.
*John Aitken Welsh, M.A.

17th April 1895.

William Dunbar MacDougall, M.A.
Walter James Robertson, M.A.

1st August.

*Francis Molison Anderson, M.A
*James Ballantyne, M.A.
John Erskine Dods, M.A.

* Passed with Distinction. See note 2 on page 530.

Alexander James Louttit Laing, M.A.
*Charles Lippe, M.A.
Alexander M'Callum, M.A.
William George Manson, M.A.
*John Arthur Thomas Robertson, M.A.
James Rose, M.A.
*James Miller Thomson, M.A.
David Milne Watson, M.A.

11th April 1896.

*James Adamson, M.A.
Arthur James Alison, M.A.
William Blair, M.A.
James Dunlop, M.A.
*Hugh Archibald Hamilton, M.A.
Robert Macfie, M.A.
Robert Dundonald Melville, M.A.
James Duncan Millar, M.A.
William Mitchell, M.A.

DEGREE OF B.L.

1889.

*Robert Liddell Cockburn.
John Glover.
William Stowell Haldane.
John Lumsden Macpherson, M.A.
John James Waugh.

1890.

Duncan Cameron
Duncan Archibald Maccoll.
Robert Watson.

1891.

John Scrymgeour Hepburn.
John Nisbet.
William Alexander Stewart.
Thomas Trotter.

1893.

John Romanes.
Thomas Edward Taylor, M.A.

1894.

*Alexander Douglas Donald.
Buckham William Liddell.

1895.

Geo. Ernest Rawson Coldstream.
William Alexander Cullen.

11th April 1896.

James Dan Easson.
*Alexander Speeden Riach.
David Ritchie.
*William Gowan Dobie Simpson.

DEGREE OF DOCTOR OF LAWS (LL.D.).[1]

The Degree of Doctor of Laws is conferred *honoris causâ tantum*. It was first granted in 1695. Previously to 1751 it had been conferred on seven persons only. Since then more than 400 names, including some of the most distinguished in Europe, have been added to the list. The degree is not conferred in absence except in very special cases.

The following is a list of those upon whom the Degree of Doctor of Laws has been conferred in 1889-1896 : —[2]

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* Passed with Distinction. See note 2 on page 530.

[1] Those to whom the Degree has been offered, if unable to be present at the Graduation Ceremonial immediately ensuing, may present themselves at any subsequent Ceremonial, on giving at least a week's notice.

[2] The names of those who received the Degree prior to 1859 will be found in the "Catalogue of the Graduates in the Faculties of Arts, Divinity, and Law of the University of Edinburgh since its foundation," published in 1858, and of those who received the Degree from 1859 to 1888, both years included, in the List of Graduates published in 1889, and in previous Calendars.

1889.

[1] Sir Syed Ahmed Khan, Bahadûr, K.C.S.I.
J. E. T. Aitchison, C.I.E., M.D., F.R.S., &c.
[1 2] James D. Dana.
[1] Francis Day, C.I.E., &c.
[1] Hon. David Dudley Field.
[1 2] C. Gegenbaur.
[1 2] E. Haeckel.
[1] Rudolf von Jhering, Dr. Jur.
[1 2] E. E. Kummer.
William Mackintosh, M.A., Q.C.
[1 2] Konrad Maurer.
Maurice Paterson, B.A.
Richard Quain, M.D., F.R.S., &c.
[1] Rudolf von Roth, Ph.D.
[1 2] Barthélemy St. Hilaire.
[1 2] Jules Simon.
Whitley Stokes, C.S.I., C.I.E., D.C.L., &c.
[1 2] Geheimrath Heinrich von Sybel.
James Ward, M.A., D.Sc.
[1] William Dwight Whitney.
[1 2] B. Windscheid.

1890.

Sir Benjamin Baker, C.E.
Pierre Paul Leroy-Beaulieu.
Right Hon. Henry Chaplin, M.P.
Sir Dyce Duckworth, M.D.
Sir John Fowler, Bart., C.E.
[1] James Anthony Froude, M.A., LL.D.
Joseph H. Gilbert, M.A., Ph.D., LL.D., F.R.S.
William W. Goodwin, D.C.L.
James Hardy.
Sir John Kirk, M.D., G.C.M.G.
General Robert Maclagan, R.E.
John Marshall, M.A.
Right Hon. J. P. B. Robertson, M.P.
Frederic Seebohm, F.S.A.
[1] Emeritus-Professor C. Piazzi Smyth, F.R.A.S., &c.
H. M. Stanley.
Spencer Walpole.

1891.

Alexander Asher, Q.C., M.P., &c.
John Beddoe, M.D., F.R.S, &c., &c.
Major C. R. Conder, R.E., D.C.L.
Felix Dahn.
Alexander Campbell Fraser, D.C.L., LL.D.
Cunningham Geikie, D.D.
George Joachim Goschen, M.P.
Sir George Murray Humphry, M.D., F.R.S.
Colonel Sir Colin Campbell Scott Moncrieff, K.C.M.G., C.S.I.
Professor Simon Newcomb.
Sir Herbert Stanley Oakeley, M.A., Mus. Doc., LL.D., D.C.L.
John Johnstone Rogerson, B.A., LL.B.

1892.

Surgeon-General James Macnabb Cuningham, M.D., &c.
[1] Rev. C. V. A. Van Dyck, M.D., D.D.
Robert M. Ferguson, Ph.D., F.R.S.E.
Rt. Hon. Sir Edward Fry.
[1] Theodore Nöeldeke.
Dr Jakob Schipper.
Hon. Sir Charles Tupper, Bart., G.C.M.G., C.B., M.D.
[1] Rev. Thomas Walker, M.A.
Robert Boog Watson, B.A., F.R.S.E.

1893.

Geheimrath Professor Dr Arthur Auwers.

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[1] Conferred *in absentia*.
[2] Tercentenary Graduates unable to be present in 1884.

Sir I. Lowthian Bell, Bart., F.R.S.
John Sutherland Black, M.A.
Sir George Buchanan, M.D., F.R.S.
Rt. Hon. Sir Stuart Knill, Bart.
Henry Duncan Littlejohn, M.D., F.R.C.S. Edin.
Alfred Marshall, M.A.
John Rhys, M.A.
His Excellency General the Right Hon. Lord Roberts, of Candahar, G.C.B., G.C.I.E., V.C., R.A. (B.).
Lieut.-Colonel Justin C. Ross, C.M.G.
Rev. Walter C. Smith, D.D.
Alexander Moody Stuart.
Ramsay Heatley Traquair, M.D., F.R.S.

1894.

John Taylor Brown.
W. H. Gaskell, M.D., F.R.S., Lecturer on Physiology, University of Cambridge.
Henry Goudy, M.A., LL.B., Regius Professor of Civil Law, Oxford.
Professor Franz Kielhorn, Ph.D., University of Göttingen.
Professor Diodato Lioy, Doctor of Law, University of Naples.
Charles B. Logan, W.S., Deputy Keeper of the Signet.
David Patrick, M.A., B.D.
Rt. Hon. Sir Charles John Pearson, M.A., Q.C., M.P.
Right Hon. James Alex. Russell, M.A., B.Sc., M.B., C.M., Lord Provost of Edinburgh.
George Wilson, M.A., M.D., Medical Officer of Health, Mid-Warwick.

17th April 1895.

Rev. William Cunningham, M.A., D.Sc., D.D.
Hon. Lord M. T. Stormonth Darling, M.A.
Professor W. M. Flinders Petrie, M.A., D.C.L.

1st August.

Joseph Remi-Leopold Delbœuf, Ph.D., D.Litt., D.Sc., Professor of Philology in the University of Liège.
Thos. Edmonson Charles, M.D., Rome; Honorary Member of the British and American Archæological Society.
S. Weir Mitchell, M.D., Philadelphia, LL.D. (Harvard), M.D. *honoris causa* (Bologna).

11th April 1896.

P. Hume Brown, M.A.
Emeritus-Prof. David Masson, LL.D., Historiographer Royal for Scotland.
Douglas Argyll Robertson, M.D., F.R.C.S. (Edin.), &c.
John Alexander Stewart, M.A., Christ Church, Oxford.
David Duncan, M.A., D.Sc., Director of Public Instruction, Madras.

14th May.

Sir J. Russell Reynolds, Bart., M.D., &c.

29th May.

Giosuè Carducci, Professor of Italian Literature, Bologna.

Bursaries, Scholarships and Prizes, &c., in the Faculty of Law.

I.—BURSARIES.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patron.
I.	1873	The Grierson Trustees.	£80 0 0	3	1	About £26 13 4	Senatus.
II.	1873	Geo. Cairns, Solicitor.	18 19 4	1	1	About 18 19 4	Senatus.
III.	1878	DrAndrew Thomson.	100 0 0	4	4	25 0 0	Trus. of Dr Thomson.

I. There are three Grierson Bursaries, each of the value of £26, 13s. 4d. annually. Deserving students from the parishes of Crawford or Leadhills, applying to the Clerk of Senatus on or before the 1st day of September, are entitled to preference, if they satisfy certain conditions;[1] and if the applicant is commencing his first Winter Session of the Law Curriculum he will be entitled to hold the Bursary for three years, provided "he prosecutes his studies with proper diligence."[1] The subjects of examination are Elementary Latin, English, and Arithmetic. See Outline of Subjects, pages 112 and 128, and Time-Table of Examinations, page 132.

Failing preferential candidates, the Bursaries will be tenable for one year only, and will be awarded to candidates who have attended one year in the Faculty of Arts in some University. 1. In the case of those commencing their first Winter Session in Law, the award will be to the candidate who has passed highest in Latin and Moral Philosophy at the Arts Graduation examination in October. 2. In the case of candidates commencing their second Winter Session—to the most distinguished law-student of that standing, who, if not a Graduate in Arts, has passed satisfactorily in Latin and Moral Philosophy at the Arts Examination, either in October or earlier. 3. In the case of candidates commencing the third Winter Session of the Law Curriculum—to the most distinguished law-student of that standing who has passed satisfactorily in Latin, Moral Philosophy, and Logic at the Arts Examination in October or earlier. See Regulations, CALENDAR 1877-78, p. 370. *Bursars in* 1895—First year, *R. P. Miller.* Second year, *William Burt.* Third year, *R. D. Melville.*

II. The competition for the Cairns Bursary, which is tenable for one

[1] See CALENDAR 1877-78, p. 370. By "proper diligence" is understood regular attendance on Classes, and reasonable proficiency in Class Examinations.

year only, and is not subject to any preferences, is subject to the same conditions as those for the second year Grierson Bursary. This Bursary is open to Students who have completed one year in the Law Faculty. *Bursar*—1895, *R. MacGregor Mitchell.*

III. For the *Thomson Bursaries* application should be made to Messrs Traquair, Dickson & Maclaren, 11 Hill Street. Candidates of the name of Thomson or Traquair, or natives of the town or county of Dumfries, or of the city of Edinburgh, are preferred. The Examination is in Latin and Moral Philosophy, and is the same as the October Examinations in those subjects for M.A. See CALENDAR 1879-80, p. 345. *Bursars*—1891, *Alexander M'Callum.* 1892, *Robert Macfie.* 1893, *James MacKenna.* 1894, *Malcolm M. MacInnes, M.A.* 1895, *W. H. Sellar.*

Bursaries in the Faculty of Arts, the holders of which may study in the Faculty of Law (see also under Faculty of Arts):—

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patron.
I.	1809	Dr Donald Grant, London.	£180 0 0 About	4	4	£45 0 0 About	Dr Grant's Trustees.
II.	1846	John Jamieson, Edinburgh.	26 0 0 About	1	4	26 0 0	Principal and Two Professors.
III.	1871	The Sibbald Bursaries.	150 0 0	5	3	30 0 0	Trustees of Dr J. R. Sibbald.
IV.	1883	Wm. Renton, Edinburgh.	19 19 6	1	1	19 19 6	Professors of Mathematics, Natural Philosophy, Chemistry, and Political Economy.
V.	1886	R. Allan, Feuar, Kelso.	About 90 0 0	3	3	About 30 0 0	Trustees of R. Allan.
VI.	1889	Daniel MacLaurin, London.	70 0 0	1	4	70 0 0	Town Council.

II.—SCHOLARSHIPS.

General Regulations for Vans Dunlop Scholarships.

Four Vans Dunlop Scholarships, each of about £100 per annum, tenable for three years, are more or less directly connected with the Faculty of Law:—

Candidates for Nos. I. and IV. must have regularly attended in at least one class in the University of Edinburgh during each Winter Session in which they claim to have been Matriculated Students; and no Candidate is eligible who has discontinued attendance at the University for more than one year.

Candidates for a Vans Dunlop Scholarship must enter their names and addresses *at least a fortnight* before the date of examination, at

the *Matriculation Office, University, Edinburgh*, and produce evidence that they are eligible. They are required to be Matriculated students of the year in which the competition takes place.

I. *Vans Dunlop Scholarship in Commercial and Political Economy and Mercantile Law*, for which both Law and Arts Students are eligible. For Regulations, see under Scholarships in Faculty of Arts.

Next vacancy in November 1896.

II. *Vans Dunlop Scholarship in the Law of Nature and Nations, Civil Law, and Constitutional Law and History.* The Regulations for competition are as follows:—

(*a.*) The Competition is open to all Candidates who, within the three years immediately preceding the date of competition, shall have graduated in Law in this University, or shall have passed the Graduation Examination in the three subjects of examination for the Scholarship: provided they have written papers of the LL.B. standard at the Graduation Examination, and have obtained an average of not less than 75 per cent. of marks in these subjects.

(*b.*) The Competition is by written Essays on branches of law to be announced at least one year before the date of competition. The precise subject of each of the essays will be set on the conclusion of the Graduation Examination in October.

(*c.*) The Examiners are the Professors of the prescribed subjects, assisted by the additional Law Examiners.

Next vacancy in October 1898.

1895. *Thomas Callander Wade, M.A., LL.B.*

III. *Vans Dunlop Scholarship in Scots Law and Conveyancing.*

(*a.*) The Competition is open to all Candidates who, within the three years immediately preceding the date of competition, shall have graduated in Law in this University, or shall have passed the Graduation Examination in Scots Law, Conveyancing, and Medical Jurisprudence: provided they have obtained at the Graduation Examination an average of not less than 75 per cent. of marks in these three subjects.

(*b.*) The Competition is by written Essays on (1) the Civil Law of Scotland, (2) the Criminal Law of Scotland, and (3) Conveyancing, the particular branches of which will be announced at least one year before the date of competition. The precise subject of each essay will be set on the conclusion of the Graduation Examination in October.

(*c.*) The Examiners are the Professors of the prescribed subjects, assisted by the additional Law Examiners.

Next vacancy in October 1896.

Scholars—1893, *Alexander D. Donald, B.L.*

Conditions of Tenure.

Each holder of No. II. and No. III. of these Scholarships will be required to deliver, to the satisfaction of the Faculty of Law, two courses of three lectures each on one of the subjects of examination

for the Scholarship, viz., one course in the second, and the other in the third year of his tenure.

IV. *Vans Dunlop Scholarship in History.*

For Regulations, see under Scholarships in Faculty of Arts.

Next vacancy in October 1898.

V. The Lorimer Travelling Scholarship.

The Lorimer Travelling Scholarship, of the annual value of about £50, tenable for two years, for the encouragement of the study of the "Law of Nature and Nations" in foreign Law Schools by Students and Graduates in the Faculty of Law, was founded by the Lorimer Memorial Committee and the Association for the better Endowment of the University. The Scholarship is open to Candidates who, during the two years immediately preceding that in which a scholar falls to be appointed, have completed the examinations for a Degree in Law in the University in the following subjects, namely—(1) The "Law of Nature and Nations" (including therein the Philosophy of Law); (2) The Civil Law; and (3) Either (*a*) Constitutional Law and History, or (*b*) Political Economy. The foreign Law School or Schools which the Scholar proposes to attend must be previously approved by the Faculty of Law. The Candidate who, in the opinion of the Faculty of Law, passes with most distinction in the examinations for Graduation in Law, in the subjects above set forth, during the two years immediately preceding the election, and who is willing to fulfil the conditions imposed by the Deed of Foundation, will be eligible, consideration being always given to his proficiency in the first of the above-named subjects, and to his knowledge of the modern language or languages spoken in the Law School or Schools where he proposes to study. For Deed of Foundation, see Calendar for 1892-93, p. 538.

This Scholarship may be offered for competition in July 1897.

VI. Gray Scholarship for Research.

For Regulations, see under Scholarships in the Faculty of Arts.

III.—WILLIAM DICKSON TRAVELLING FUND.

This fund is for the purpose of assisting Graduates of any Faculty of not more than three years' standing to travel for the purposes of study or research. For particulars, see page 356.

IV.—PRIZES.

The *Forensic Prize*, of the value of £10, founded in 1858 by the Forensic Society with the view of encouraging the study of Roman Law, is awarded annually either in July or in October, as may be found convenient. It can be competed for only by Students of the Civil Law Class during the preceding year. The Fund, amounting to about £280,

is invested in the name of the Dean and Treasurer of the Faculty of Advocates and the Professors of Civil and Scots Law.

1895, Not awarded.

The *Muirhead Prize*, of about £17, 10s. annually, is awarded to the Student who gains the first place in the Class of Civil Law, as determined by the results of the periodical examinations during both the Winter and Summer Sessions.

1895, *William Burt, M.A.*

SCHOLARSHIPS, BURSARIES, AND PRIZES, &c., OPEN IN 1896-97.

Candidates for Scholarships must enter their names and addresses, and exhibit the necessary certificates, at the Office of the Clerk of Senatus at least fifteen days before the date of the competition.

The examination for first-year Bursaries is in Latin and Moral Philosophy. Candidates to give in their names on or before 1st October. Applicants for the second and third year Grierson Bursaries must apply on or before 15th October, and must state what distinctions they have attained in the Law Classes of the previous year.

Applications for grants from the William Dickson Travelling Fund must be lodged on or before 15th March.

Where the competition is open to Graduates, their standing will be computed from the date of the Graduation Ceremonial immediately following the completion of their Law Examinations.

I.—Scholarship.

No. I. of the above Scholarships will be open for competition after the conclusion of the Graduation Examination in October 1896. For the works recommended to Candidates, see under Faculty of Arts.

No. III. of the above Scholarships will be offered for competition after the conclusion of the Graduation Examinations in October 1896. The subjects of the Essays to be set for this Scholarship will be taken from the following branches of Law:—(1.) The Law of Succession and Trust; The History of Criminal Procedure. (2.) The Law of Heritable Securities; The Law of Entails.

II.—Bursaries.

The subjects of examination for first-year Bursaries are Latin and Moral Philosophy, and are the same as the October Examinations in these subjects for M.A.

1, 2, 3. *Three Grierson Bursaries*, value £26, 13s. 4d. each, restricted in the first place to natives of the parishes of Crawford and Leadhills, and tenable for three years, whom failing they will be tenable for one year. One will be open to Students beginning their first Winter Session, one to Students beginning their second Winter

Session, and one to Students beginning their third Winter Session (see general rule as to application, *sup.*).

3. The *Cairns Bursary*, value £18, 19s. 6d., tenable for one year (see general rule, *sup.*).

4. The *Sibbald Bursaries*, No. XLIV., page 336. Apply to Messrs Mackenzie, Innes & Logan, 23 Queen Street, Edinburgh, before 15th September.

5. A *Thomson Bursary*, of £25 a year, tenable for four years. Candidates must be Matriculated Students commencing their First Winter Session in the Faculty of Law, and must intimate their intention to compete to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, the Agents for Dr Thomson's Trustees, and also to the Clerk of the Senatus on or before 1st October. Candidates of the name of Thomson or Traquair, or natives of the town or county of Dumfries or the city of Edinburgh, are preferred.

6. *Renton Bursary*, No. LXII., page 363. The examination is in English and Elementary Mathematics, and will take place on Saturday, 31st October, at 10 o'clock. Names of Candidates to be entered at the Matriculation Office, on or before 23rd October.

III.—Prizes.

1. The *Forensic Prize* of £10 is awarded annually, either for the best Essay upon a subject prescribed by the Professor of Civil Law, or as the result of a special examination held either in July or October. It can be competed for only by Students who have attended the Civil Law Class during the preceding year. The subject of Essay or date of Examination, as the case may be, is announced by the Professor early in the session.

2. The *Muirhead Prize*, see page 539.

3. The *William Dickson Travelling Fund.* See page 356.

4. The *Lord Rector's Prize.* See No. 2, page 359.

5 and 6. *The Gray Prizes.* See Nos. 7 and 8, page 359.

The attention of all Bursars in the Faculty of Law is particularly called to the following Regulation:—

"Bursars connected with the Faculty of Law must annually attend and perform the work of at least one Class in the Faculty.

"Each Bursar must present a Certificate, signed by the Dean, attesting his regular attendance, &c., on each occasion on which he applies to the Factor for a payment."

Certificates, in terms of this regulation, will be given to Bursars by the *Dean of the Faculty of Law* after the 12th November; also at the end of the Session in April. In applying to the Dean for the Certificate in November, Bursars must present to him their Class Cards for the Session, as evidence that they have enrolled in their classes; and at the end of the Session they must present to him certificates from the

Professors to the effect that they have attended with regularity and have performed the work of the Class. Payments are made by the Factor for the University, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 16th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars and Scholars who desire to resign should at once announce this to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

L. J. GRANT, Bart., B.A.,
Dean of the Faculty of Law.

Faculty of Medicine.

Dean—PROFESSOR THOMAS R. FRASER, M.D., LL.D., F.R.S.

Programme of Classes.

WINTER SESSION, 1896-97.

Students who do not intend to graduate in Medicine in this University may attend any of the Classes in the Faculty on payment of the Matriculation and Class Fees. Those who intend to graduate must pass the Preliminary Examination before attendance on any Class will qualify for Graduation.

The Classes in the Faculty will be opened on Tuesday, 13th October, and will meet daily (Saturdays excepted), unless otherwise stated.

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.[1]
Medicine	13 Oct., 9 o'cl.	Professor Sir T. Grainger Stewart,	£4 4
Chemistry	13 Oct., 10 ,,	Prof. Crum Brown	4 4
Chemistry—Advanced Course	5 Jan., 4 ,,	Prof. Crum Brown	2 2
Practical Chemistry	1 Dec., 11 and 2 o'cl.	Prof. Crum Brown	3 3
Surgery	13 Oct., 11 ,,	Prof. Chiene, ...	4 4
Physiology or Institutes of Medicine	13 Oct., 10 ,,	Prof. Rutherford,	4 4
Practical Physiology	14 Oct., 1 ,,	Prof. Rutherford,	3 3
Do. (Advanced[2])...	20 Oct., 11 ,,	Prof. Rutherford,	4 4
Midwifery & Diseases of Women & Childr.	13 Oct., 10 ,,	Prof. Simpson, ...	4 4
Clinical Surgery[3]—Royal Infirmary, *Mon. & Thurs.*	15 Oct., 12 ,,	Prof. Annandale,	4 4
Clinical Medicine[3]—Royal Infirmary, *Tues. & Fri.* ...	13 Oct., 12-2 o'clock	Professors Sir T. Grainger Stewart, Fraser, and Greenfield; and Simpson on Diseases of Women,	4 4
Clinical Instruction in the Royal Infirmary	11 *daily.* . .	The Clinical Professors	Hospital Ticket.[4]

[1] Fees for second and subsequent attendances, see page 545.
[2] This Class meets for two hours twice a week throughout the Winter Session only.
[3] Only open to Students holding the Hospital Ticket.
[4] For Fees, see page 546.

WINTER SESSION—*continued.*

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees[1]
Anatomy	13 Oct., 1 o'cl.	Prof. Sir William Turner,	£4 4
Practical Anatomy	1 Oct., *daily*		3 3
Anatomical Demonstrations (Regional Anatomy)	13 Oct., 4 o'cl.	David Hepburn, M.D.,	2 2[2]
Materia Medica	13 Oct., 2 ,,	Prof. Fraser,	4 4
Pract. Mat. Medica, includ. Pharmacy	14 Oct., 10 ,,		3 3
Experimental Pharmacology	14 Oct., ,,	W. C. Sillar, M.B., B.Sc.	3 3[3]
Pathology	13 Oct., 11 o'cl.	Prof. Greenfield,	4 4
Practical Pathology	14 Oct., *daily*		3 3
Pathological Bacteriology	20 Oct.	Robert Muir, M.D.	3 3[3]
Zoology (Elementary)[4]	13 Oct., 12 o'cl.	Prof. Ewart,	4 4
Do. (Elementary Practical)[4]	13 Oct., ,,		2 2[5]
Do. (Advanced)[4]	13 Oct., 1.30,,		3 3[5]
Vertebrate Morphology (with Laboratory Work)	13 Oct., 2 ,,	John Beard, D.Sc.	3 3[5]
Comparative Embryology	12 Jan., 2 ,,		3 3[3]
Physics[4]	13 Oct., 3 ,,	C. G. Knott, D.Sc.	3 3
Advanced Botany[4]	13 Oct., 11 ,,	Prof. B. Balfour,	2 2[6]
Prac. Bot. (Advanced)[4]	13 Oct., 11 ,,		3 3[6]
Medical Jurisprudence and Public Health	*Given in Summer Session*	Prof. Sir Douglas Maclagan,	4 4
Public Health Lectures	22 Jan., 2 o'cl.		0 0[7]
Mental Diseases, with Clinical Instruction at Morningside Asylum	*Given in Summer Session*	T. S. Clouston, M.D.,	2 2[3]
Diseases of the Eye	*Given in Summer Session*	G. A. Berry, M.B.	2 2[3]
Clinical Instruction on Diseases of Children at Royal Hospital for Sick Children	16 Oct., 11 A.M.	Jas. Carmichael, M.D., John Playfair, M.D.,	2 2[3]

[1] See footnote 1, p. 542. [2] When taken along with Practical Anatomy, £1, 1s.
[3] Five Shillings University Entrance-Fee for Non-Matriculated Students.
[4] Three Months' Course. [5] Besides charge of 10s. for Laboratory Expenses.
[6] Besides Garden Fee of 5s.
[7] Open to Members of Medical Jurisprudence Class, 1896.

SUMMER SESSION, 1897.

The Classes will be opened as follows, and will meet daily (Saturdays excepted), unless otherwise stated.

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.[1]
Elementary Botany.....	4 May, 8 o'cl.	Prof. Bayley Balfour,	£4 4[2]
Practical Botany.....	4 May, 9 „		2 2[2]
Field Demonstrations on *Saturdays*.			
Physics	4 May, 12 „	Prof. Tait, ...	3 3
Medical Jurisprudence and Public Health...	4 May, 10 „	Prof. Sir Douglas Maclagan,	4 4
Zoology (Elementary)..	4 May, 12 „	John Beard, D.Sc.	4 4
Zoology (Elemy. Prac.)	4 May.[6]	Prof. Ewart,	2 2[3]
Invertebrate Zoology...			2 2[3]
Do., with Laboratory Work.....			3 3[3]
Advanced Zoology (embracing a Course on Comparative Morphology of the Invertebrata and an Advanced Laboratory Course).....			3 3[3]
Prac. Materia Medica (incl. Pharmacy).....	4 May, 10 „	Prof. Fraser,....	3 3
Chemistry (Practical)..	4 May, 2 „	Prof. Crum Brown,	3 3
Do. (Organic)....	4 May, 1 „		2 2
Practical Anatomy.....	4 May, *daily*.	Prof. Sir W. Turner and Demonstrators,	2 2
Anthropology—(*Tues.*, *Wed.*, *Th.*)	4 May, 2 o'cl.	Prof. Sir W. Turner,	2 2[4]
Anatomical Demonstrations (Regional Anatomy)[7]	4 May, 11 *daily*.	David Hepburn M.D.	
Clinical Surgery,[5] Royal Infir. (*Mon.* & *Thur.*)	6 May, 12 „	Prof. Annandale,	3 3
Clinical Medicine,[5] Royal Infirmary (*Tues.* & *Fri.*)	4 May, 12 to 2	Professors Sir T. Grainger Stewart, Fraser and Greenfield; and Prof. Simpson on Dis. of Women.	3 3

[1] See footnote 1, page 542. [2] Besides Garden Fee of 5s.
[3] Besides charge of 10s. for Laboratory Expenses.
[4] When taken with Practical Anatomy, £1. 1s.
[5] Only open to Students holding the Hospital Ticket.
[6] At hours to be arranged. [7] Free when taken along with Practical Anatomy.

SUMMER SESSION—*continued.*

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.[1]
Clinical Instruction in the Royal Infirmary..	12 *daily.* . .	The Clinical Professors.	Hospital Ticket.[2]
Obstetrical and Gynecol. Operations—(*Tues. & Fri.*)	4 May, 10 o'cl.	Prof. Simpson,	£3 3
Practical Physiology, including Histology....	4 May, 11 o'cl.	Prof. Rutherford,	3 3
Do. (Advanced)...	*In Winter only.*		3 3
Operative Surgery and Surgical Appliances	20 April.....	Prof. Chiene, ...	3 3
Practical Morbid Anatomy and Pathology	4 May, 11 o'cl.	Prof. Greenfield,	3 3
Mental Diseases, with Clinical Instruction at Morningside Asylum (*Mon. Wed. & Frid.*)	5 May, 3 o'clock	Thos. S. Clouston, M.D., ...	2 2[3]
Diseases of the Eye ...	10 May, 9 ,,	Geo. A. Berry, M.B.	2 2[3]
Clinical Instruction on Diseases of Children, at Royal Hospital for Sick Children..... (*Tues. and Fri.*)...	4 May, (*Tues. and Fri.*, 11 A.M.)	James Carmichael, M.D., John Playfair, M.D., ...	2 2[3]

[1] Fees for second and subsequent attendances, see below.

[2] See Fees, page 546.

[3] Five Shillings University Entrance-Fee for Non-Matriculated Students.

FEES FOR SECOND AND SUBSEQUENT ATTENDANCES.

Second attendances on £4, 4s. Courses, £3, 3s.; on £3, 3s. Courses, £2, 2s.; subsequent attendances free. Second attendances on £2, 2s. Courses, no reduction; third or subsequent attendances, £1, 1s. Second or subsequent attendances on Class of Diseases of Children, £1, 1s. Clinical Surgery: nine months' ticket, if taken primarily, £6, 6s. (perpetual ticket); three months' after a six months' Course, £3, 3s.; three months' primary entry, £3, 3s.; second three months, £2, 2s.; third three months, £2, 2s. Perpetual ticket for initial payment for any Course in the Faculty, £6, 6s. Practical Classes and Laboratories, no reduction.

ROYAL INFIRMARY.

Royal Infirmary at Eleven *daily*.—Perpetual Ticket, in one payment, £12; Annual Ticket, £6, 6s.; Six Months, £4, 4s.; Three Months, £2, 2s. Separate payments, amounting to £12, 12s., entitle to a Perpetual Ticket.

MATRICULATION.

Students are required to take out their Matriculation Tickets and their Class Tickets not later than fifteen days after the beginning of the course. Matriculation consists in paying annually an entrance fee to the University, and in inscribing the name in the Students' Album.

All Candidates for Degrees, not Students of the University, availing themselves of the permission to attend the Classes of Extra-Academical Teachers in Edinburgh, must conform to the Regulations, Section VIII., 5, 6, page 599.

The Matriculation Fees, &c., are—

For the Academic Year (1st October to 1st October) .	£1 1 0
For the Summer Session only (1st May to 30th September)	0 10 6
Candidates appearing for Graduation Examinations or for Graduation, pay £1, 1s., unless previously matriculated for the whole year.	
University entrance-fee in lieu of Matriculation for each of certain additional Courses	0 5 0

CLASS SESSIONS.

There are Two Sessions in each year, viz. :—

I. The Winter Session, which opens on Tuesday, 13th October 1896, and closes on Friday, 19th of March 1897. Practical Anatomy and Public Health Laboratory work begin on the 1st of October 1896.

The Classes will meet for the last time before the Christmas Vacation on Friday, 18th December 1896, and will reassemble on Tuesday, 5th January 1897.

II. The Summer Session, which opens on Tuesday, 4th May, and closes on 16th July 1897.

LABORATORIES, MUSEUMS, &c.

The University contains the following Laboratories and Museums, several of the latter belonging in part to the Professors of the respective subjects :—

I. LABORATORIES.

The Physical Laboratory, established with the view of affording Students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries, is open daily from 10 to 3, under the superintendence of Professor Tait.

THE ROYAL BOTANIC GARDEN LABORATORY, open daily for the practical study of plants and for research, under the superintendence of the Professor, assisted by James Adam Terras, B.Sc., and J. H. Burrage, B.A.

PHYSIOLOGICAL LABORATORY, for the prosecution of Physiological Research, and for the study of Practical Physiology, open daily, under the superintendence of the Professor, assisted by E. W. Carlier, M.D., C.M., B.Sc., and Robert Hutchison, M.D., C.M.

PRACTICE OF PHYSIC LABORATORY, for the study of Medicine, and for research in connection with the Practice of Physic, open daily, under the superintendence of the Professor, assisted by Robert A. Fleming, M.A., M.D., C.M.

DISSECTING ROOMS, open daily under the superintendence of Professor Sir William Turner, assisted by David Hepburn, M.D.; J. B. Yeoman, M.B., C.M.; and other assistants. Open 1st October 1896 and 4th May 1897.

THE CHEMICAL LABORATORIES (distinct from the Practical Chemistry Room), completed in 1885, contain accommodation for forty Students, and are fitted with all necessary apparatus for chemical analysis and research. They are open daily, under superintendence of the Professor, assisted by Leonard Dobbin, Ph.D.; Hugh Marshall, D.Sc.[1]

OBSTETRICAL AND GYNECOLOGICAL LABORATORY, for research and study of practical work, under the superintendence of the Professor, assisted by J. Clarence Webster, B.A., M.D.

TUTORIAL CLASS OF CLINICAL MEDICINE, in the Wards of the Royal Infirmary, by Robert A. Fleming, M.A., M.D., C.M.; Harry Rainy, M.A., M.B., C.M.; D. A. Welsh, M.B.; under the superintendence of the Clinical Professors.

NATURAL HISTORY LABORATORIES, for study of the structure and development of Invertebrate and Vertebrate forms, open daily, under the superintendence of the Professor, assisted by J. Beard, D.Sc., Ph.D., and Gregg Wilson, M.A., B.Sc., Ph.D.[2]

MATERIA MEDICA LABORATORIES, for the study of Practical Materia Medica and Practical Pharmacy, and for Pharmacological and Pharmaceutical research, open daily, under the superintendence of the Professor, assisted by William C. Sillar, M.B., C.M., B.Sc., and

TUTORIAL CLASS OF CLINICAL SURGERY AND SURGICAL PATHOLOGY, in the Infirmary, by John Wheeler Dowden, M.B., C.M.,

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[1] Fees for Chemical Laboratory:—*Whole day*—Winter Session, £10, 10s.; Oct.-Dec., Jan.-March, or Summer Session, £5, 5s. *Half day*—Winter Session, £6, 6s., Oct.-Dec., Jan.-March, or Summer Session, £3, 3s. Preference will be given to Students in the above order. Students who are not Matriculated may attend the Chemical Laboratory on payment of the Entrance Fee of 5s., in addition to the Laboratory Fee.

[2] Fees—Winter Session, £10, 10s.; Summer Session, £6, 6s.

F.R.C.S.E., and the Resident Surgeons, under the superintendence of the Clinical Professor.

PUBLIC HEALTH LABORATORY, for Hygienic investigation, comprises three departments, viz. : a Chemical, a Bacteriological, and a Meteorological Department, open daily, under the superintendence of the Professor, assisted by Charles Hunter Stewart, M.B., C.M., D.Sc., and J. Buchanan Young, M.B., C.M., D.Sc. Opens 1st October 1896 and 4th May 1897.[1]

SURGICAL LABORATORY, divided into two parts—(*a*) General Surgical Pathology, (*b*) Bacteriology,—is utilised for teaching Systematic Surgery, and every facility is afforded for investigation, under the superintendence of the Professor, assisted by Harold J. Stiles, M.B., C.M., F.R.C.S.E.

PATHOLOGICAL LABORATORY, for the study of Pathological Anatomy and for Pathological Research, including Histological and Bacteriological Departments, under the superintendence of the Professor, assisted by Robert Muir, M.A., M.D., and D. A. Welsh, M.A., B.Sc., M.B., C.M.

THE ROYAL EDINBURGH ASYLUM is open to members of the Class of Mental Diseases for Practical Instruction, under the superintendence of the Physician-Superintendent.

PRACTICAL INSTRUCTION in the use of the Ophthalmoscope and in the detection of errors of refraction is given to members of the Class of Diseases of the Eye at the Eye Wards of the Royal Infirmary, under the Superintendence of the Lecturer.

II. MUSEUMS. (See page 51.)

GENERAL MEDICAL COUNCIL REGISTRATION OF STUDENTS OF MEDICINE.

According to the Regulations of the General Medical Council of the United Kingdom, all Medical Students must register in the Medical Students' Register of the General Medical Council within fifteen days after the commencement of Medical Study. Forms of application and full information regarding Registration may be obtained from James Robertson, Registrar of the Branch Council for Scotland, 1 George Square, Edinburgh, or at the Office of the Faculty of Medicine.

MINIMUM CURRICULUM FOR DEGREES OF M.B. AND Ch.B., WITH SUGGESTED ORDER OF STUDY AND EXAMINATION.

Before beginning Medical Study, students must pass the Preliminary Examination in General Education, either at the University, or elsewhere, according to the requirements of the University.

Medical Study may be begun either in October (Winter Session) or May (Summer Session), and must be engaged in for at least five years.

1 See footnote 2, page 547.

A.—*For Students beginning in Winter.*

FIRST WINTER SESSION.
- Chemistry, including Practical Chemistry.
- Physics,[1] or Elementary Zoology.
- Anatomy (Lectures).
- *Examination in Chemistry, including Practical Chemistry, and either Physics or Elementary Zoology.*

FIRST SUMMER SESSION.
- Elementary Zoology or Physics.[1]
- Elementary Botany.
- *Examination in Elementary Botany and Elementary Zoology or Physics.*

SECOND WINTER SESSION.
- Practical Anatomy.
- Physiology.
- Surgery.

SECOND SUMMER SESSION.
- Practical Physiology.
- Practical Materia Medica.
- Clinical Surgery (with Dressership).
- Hospital.

THIRD WINTER SESSION.
- Materia Medica.
- Practical Anatomy.
- Clinical Surgery (with Dressership).
- Hospital.
- *Examination in Anatomy, Physiology, and Materia Medica and Therapeutics* (the last may be postponed to the end of the following summer).

THIRD SUMMER SESSION.
- Practical Pathology.
- Medical Jurisprudence and Public Health.
- Clinical Medicine.
- Hospital.
- *Examination in Materia Medica and Therapeutics* (if not previously taken).

FOURTH WINTER SESSION.
- Pathology.
- Medicine.
- Midwifery and Diseases of Women and Children.
- Clinical Medicine (with Clerkship).
- Hospital.
- *Examination in Pathology, and in Medical Jurisprudence and Public Health* (the latter may be postponed to the end of the following summer).

FOURTH SUMMER SESSION.
- *Examination in Medical Jurisprudence and Public Health* (if not previously taken).

FOURTH SUMMER AND FIFTH WINTER SESSION.
- Clinical Medicine.
- Clinical Surgery.
- Mental Diseases.
- Ophthalmology.
- Post-mortem Examinations.
- Fevers.
- Diseases of Children.
- Out-practice of an Hospital, Dispensary, &c.
- Midwifery Cases and Practice.
- Vaccination.
- Hospital.

FIFTH SUMMER SESSION.
- *Examination in Surgery and Clinical Surgery, Medicine and Clinical Medicine, and Midwifery.*

[1] Three months' course.

B.—*For Students beginning in Summer.*

FIRST SUMMER SESSION.
- Elementary Botany.
- Elementary Physics.[1]
- *Examination in Elementary Botany and Physics.*

FIRST WINTER SESSION.
- Chemistry, including Practical Chemistry.
- Elementary Zoology.
- Anatomy (Lectures).
- *Examination in Chemistry, including Practical Chemistry and Elementary Zoology.*

SECOND SUMMER SESSION.
- Practical Anatomy.
- Practical Physiology.

SECOND WINTER SESSION.
- Physiology.
- Surgery.
- Practical Anatomy.

THIRD SUMMER SESSION.
- Practical Anatomy.
- Practical Materia Medica.
- Clinical Surgery (with Dressership).
- Hospital.

THIRD WINTER SESSION.
- Practical Anatomy.
- Materia Medica.
- Clinical Surgery (with Dressership).
- Hospital.
- *Examination in Anatomy, Physiology, and Materia Medica and Therapeutics* (the last may be postponed to the end of the following summer).

FOURTH SUMMER SESSION.
- Practical Pathology.
- Medical Jurisprudence and Public Health.
- Clinical Medicine.
- Hospital.
- *Examination in Materia Medica and Therapeutics* (if not previously taken).

FOURTH WINTER SESSION.
- Pathology.
- Medicine.
- Midwifery and Diseases of Women and Children.
- Clinical Medicine (with Clerkship).
- Hospital.
- *Examination in Pathology, and Medical Jurisprudence and Public Health* (the latter may be postponed to the end of the following summer).

FIFTH SUMMER SESSION.
- *Examination in Medical Jurisprudence and Public Health* (if not previously taken).

FIFTH SUMMER AND FIFTH WINTER SESSION.
- Clinical Medicine.
- Clinical Surgery.
- Mental Diseases.
- Ophthalmology.
- Post-mortem Examinations.
- Fevers.
- Diseases of Children.
- Out-Practice of an Hospital, Dispensary, &c.
- Midwifery Cases and Practice.
- Vaccination.
- Hospital.
- *Examination in Surgery and Clinical Surgery, Medicine and Clinical Medicine, and Midwifery.*

[1] Three months' course.

Courses of Lectures, &c.

1896-1897.

I. BOTANY.

PROFESSOR BALFOUR.

Winter Session, 1896.

LECTURES.—A three months' course of Advanced Lectures and an Advanced Course in Practical Botany will be given in the Winter Session.

Summer Session, 1897.

1. LECTURES.—The course is a general one—Morphological, Physiological, and Taxonomic. Lectures are given every Monday, Tuesday, Wednesday, Thursday, and Friday. In addition, lectures on special parts of the subject are given at intervals during the Session.

2. PRACTICAL CLASS.—In this class opportunity is given for the examination of microscopic structure of plants, and for the study of life-histories of plants illustrating the lectures. It is conducted by the Professor and Assistants.

3. EXCURSIONS. — Excursions are made on Saturdays for the practical study of plants in the fields.

The Royal Botanic Garden, with the Botanical Museum and Herbarium, are open daily for the examination of living as well as preserved specimens of plants.

II. NATURAL HISTORY.

PROFESSOR EWART.

1. LECTURES ON ZOOLOGY. *Winter Session.*—The first part of the course will treat of the Principles of Biology as illustrated by the Life-History, Morphology, and Physiology of one of the Vertebrata. The Distinctive Characters of the Chordata,

and the structure, habits, &c., of a series of vertebrate types will next be considered. The rest of the course will be chiefly devoted to : (1.) Leading types of Invertebrates ; (2.) Structure and life-history of the more important animal parasites ; and (3.) Elements of Embryology, Classification, and Geographical Distribution of Animals.

Summer Session.—An Elementary Course, qualifying for the First Professional and the First B.Sc. Examinations, and *pro tanto* for graduation in Arts, will be given by Dr Beard, University Lecturer on Comparative Embryology, during the Summer Session 1897.

2. Elementary Practical Zoology.—*Winter and Summer Sessions.*— In these Classes Students have the opportunity of studying practically the more important types described in the Lectures, amongst others :—Amœba, Paramœcium, Hydra, Hirudo. Arenicola, Helix, Astacus, Raia, Rana, Columba, and Lepus.

3. Advanced Courses.—These Courses are intended to assist students preparing for the Degree of B.Sc. in Zoology.

(1.) The Intermediate Course will be held during the Summer Session, and will be devoted to the Systematic Zoology of the Invertebrata. This class is prescribed for the Second B.Sc. Examination in Zoology and Comparative Anatomy.

(2.) During the Summer Session an Advanced Course of Lectures and Laboratory work will be given on the Comparative Morphology of the Invertebrata.

(3.) During the first half of the Winter Session an Advanced Course of Lectures and Laboratory work will be given by Dr Beard, University Lecturer on Vertebrate Zoology, on the Comparative Morphology of the Vertebrata. (See Faculty of Science).

The Laboratory work will extend over the first half of the Winter Session and the Summer Session.

Research Work.—The Laboratories are also available during both Sessions for research. Students desiring to be admitted should apply to the Professor. No Laboratory fees will be charged.

COMPARATIVE EMBRYOLOGY.

VERTEBRATE MORPHOLOGY.

J. BEARD, D.SC.

For Synopses, see under Faculty of Science.

III. CHEMISTRY.

PROFESSOR CRUM BROWN.

1. LECTURES—In the Lectures the general laws of chemical action are explained and illustrated.

The chief non-metallic elements and their more important compounds are discussed in detail. The metals and the different series of metallic salts are considered more generally, details being given in the case of the more important substances.

The principles upon which the classification of organic substances is based are explained, and the properties of the chief groups illustrated by means of examples.

Tutorial Classes, once a week, are conducted by Dr Dobbin.

A course of 50 lectures on Organic Chemistry is delivered in Summer.

A Class for Advanced Students is held in Winter. The subject for the Winter of 1896-97 will be Relation of Physical Properties to Chemical Composition and Constitution.

2. LABORATORY.—In the Laboratory, Students who can devote several hours each day to work, are taught Chemical Analysis (including Mineral Analysis, Organic Analysis, and Gas Analysis), the preparation of chemical substances, and the examination and determination of their properties. Students who are sufficiently advanced in such practical work may engage in the investigation of chemical problems under the superintendence of the Professor and the chief assistant.

3. PRACTICAL CLASSES.—The work of these classes consists in the study of the reactions of the commoner Salts.

Class-Book.—Notes on Reactions of Salts (Thin).

Students who have worked at least three months in the Laboratory need not attend the class of Practical Chemistry before appearing for the First Professional Examination in

Medicine, or the First B.Sc. Examination, or for Examination in Chemistry for M.A.

IV. PHYSICS.

PROFESSOR TAIT.

CARGILL G. KNOTT, D.Sc., *Lecturer.*

The subjects embraced in the Course of Physics are :—

1. Properties of Matter—including Inertia, Gravitation, Molecular Forces, &c.

2. Abstract Dynamics—including Kinematics and Newton's Laws of Motion, with their consequences as regards Statics and Kinetics of Solid, Liquid, and Gaseous Bodies, with the Physical Measurement of Time.

3. Sound, and Wave-propagation in general, Intensity, Pitch, and Quality of Musical Sounds, Harmonics, Concords, &c.

4. Heat, its Nature, Effects, Measurement, Transference, and Transformations—Measurement of Temperature and of Absolute Temperature ; Thermo-dynamics.

5. Light (1) Geometrical Optics, Speed of Light, Laws of Reflection and Refraction ; Construction and Effects of Mirrors, Prisms, Lenses, and Microscopes ; Images, Conditions of Distinct Vision ; (2) Physical Optics, Interference, Dispersion, Diffraction, Double Refraction, Polarization, Spectrum Analysis.

6. Electricity, including Frictional and Voltaic Electricity, Thermo- and Magneto- Electricity, Electro-Dynamics, and Magnetism, with their practical applications. Measurements of Potential, Electromotive Force, Current, &c., Batteries, Dynamos, Electrometers, Galvanometers, Voltameters, &c.

V. ANATOMY.

PROFESSOR SIR WILLIAM TURNER.

Winter Courses.

1. LECTURES ON ANATOMY, at 1 P.M.—It is intended in this Course to bring before the Student, in a systematic manner, the structure of the Human Body. The different systems and organs will be described, both in the more obvious arrangements and relations of parts which can be examined by the

naked eye, and in their more minute or microscopic structure. The Course includes, therefore, both Textural or General Anatomy and Descriptive Anatomy. The Lectures are illustrated by recent dissections, by wet and dry preparations, by a large collection of Osteological specimens, and by drawings and diagrams. Structures too minute to be recognised by the naked eye are demonstrated under the Microscope.

To assist the Junior Members of the Lecture Class to acquire a knowledge of Osteology, Tutorial Demonstrations on the bones will be given during the earlier months of the Session without additional fee. All the members of this class have access to a systematically arranged series of osteological specimens and of models. Written Examinations for both Junior and Senior Students are held periodically during the Session.

Text-Books.—Gray's "Anatomy," or Wilson's "Anatomy." Quain's "Elements of Anatomy," Holden's "Osteology."

2. PRACTICAL ANATOMY, under the superintendence of the Professor, aided by the Demonstrators, David Hepburn, M.D., C.M.; J. B. Yeoman, M.B., C.M.; E. H. Fraser, M.B., C.M.; R. C. Dun, M.B., C.M.; and by several other assistants. Examinations of both Junior and Senior Students on dissected parts are conducted by the Demonstrators and the Professor. Special tutorial Demonstrations will be given to Senior Students on the joints, brain, organs of special sense, and other viscera.

This Course will commence on Thursday, 1st October. The Dissecting-rooms are open from 9 A.M. to 5 P.M., and on Saturdays from 9 A.M. to noon. The Mackenzie Bursaries are awarded to members of this Class for proficiency in dissection.

Text-Books.—"Demonstrations of Anatomy," by Ellis, or Heath's "Practical Anatomy," or Holden's "Manual of the Dissection of the Human Body," or Cunningham's "Manual of Practical Anatomy."

ANATOMICAL DEMONSTRATIONS (REGIONAL ANATOMY).

DAVID HEPBURN, M.D., *Lecturer.*

In this Course, which is conducted in the Theatre, the structure of the human body is displayed and demonstrated topographically, from the surface inwards.

Summer Courses.

PRACTICAL ANATOMY.

PROFESSOR SIR WILLIAM TURNER.

This Course, beginning on 4th May, is the same as in Winter. The Rooms are open from 9 A.M. to 5 P.M.; on Saturdays from 9 A.M. to noon. Examinations are conducted on dissected parts by the Professor and by the Demonstrators, David Hepburn, M.D., C.M.; J. B. Yeoman, M.B., C.M.; E. H. Fraser, M.B., C.M.; R. C. Dun, M.B., C.M.; and other assistants, and the joints, brain, and organs of sense will be specially demonstrated.

ANATOMICAL DEMONSTRATIONS (REGIONAL ANATOMY).

DAVID HEPBURN, M.D., *Lecturer.*

This Course, open without additional Fee to those engaged in Practical Anatomy in the Summer, will consist of demonstrations on some special departments of Anatomy.

VI. PHYSIOLOGY.

PROFESSOR RUTHERFORD.

Course of at least 100 Lectures, held in Winter :—

1. The Structure, Composition, and Functions of the Elementary Tissues of the Body.
2. The Nutrition of the Body, including Circulation, Respiration, Alimentation, Nutrition of the Tissues, Excretion, together with the minute structure of the organs concerned.
3. Animal Heat.
4. Voice and Speech.
5. The minute structure and physiology of the Sense organs and the special physiology of the Nervous System.
6. Reproduction and Development.

There is a printed Syllabus with short notes of the Lectures.

PRACTICAL PHYSIOLOGY.

This Course is divided into three sections—

1. *Practical Histology*, in which every Student prepares, examines, and preserves for himself most of the tissues and

organs of the body. Each student is provided with a microscope, and all reagents.

2. *Practical Chemical Physiology*, in which every student performs the qualitative and quantitative analysis of the Urine in its normal and abnormal conditions, with special reference to clinical work, and such practical work at the Chemistry of Proteids and Carbohydrates, Blood, Milk, Bile, and Digestion, as is possible in a class. There is a printed Syllabus with short notes of this section of the Course.

The above sections of the class are held both in Winter and in Summer. The class meets sixty times.

3. *Demonstrations of Physiological Instruments.*—This section of the class is held only in Winter, and is open to all who have attended the other sections of the course.

Advanced Practical Physiology.

See Synopsis under Faculty of Science.

Physiological Research.

The Physiological Laboratory is open daily for the prosecution of Research. Application must be made to the Professor.

VII. MATERIA MEDICA AND THERAPEUTICS.

PROFESSOR THOMAS R. FRASER.

Materia Medica comprises the subjects of pharmacognosy, pharmacy, pharmacology, and therapeutics, diet, remedial uses of electricity and galvanism, heat and cold, climate, &c. Instruction in Materia Medica is given in (A) a course of 100 Lectures during the Winter Session, and in (B) Practical Classes during the Summer Session, and of equivalent duration during the Winter Session.

A.—Lectures on Materia Medica and Therapeutics. —This course includes the natural history, sensible and chemical properties, physiological action (or pharmacology), therapeutical uses, and modes of administering remedies, ordinarily so called. Such remedies consist of (*a*) inorganic substances; (*b*) chemical products; (*c*) vegetable substances; (*d*)

animal substances. Although formerly comprised in the course of instruction in Materia Medica, the remedial uses of Diet, Electricity, Climate, &c., cannot now be taught with any advantage in this course, as, under the New Medical Ordinance, the study of Materia Medica and Therapeutics is required to be completed before the student has entered upon the study of diseases.

B.—Practical Classes.—*Practical* instruction is given in the following subjects, which cannot satisfactorily be taught in lectures: 1. Pharmacy, or the processes for obtaining the pharmaceutical preparations of drugs. 2. Prescription-writing. 3. Dispensing, or the making up of medicines in forms suitable for administration in disease.

It is recommended that the Practical Class be attended before the lectures on Materia Medica and Therapeutics. Practical classes are taught in the Summer Session daily, at such hours as are found most convenient. A winter class will also be formed in October.

Research Laboratories.

The above laboratories will be open daily for research on the pharmacological action and chemical composition of medicinal substances, under the superintendence of the Professor and his assistants. Application to be made to the Professor.

Experimental Pharmacology.

W. B. SILLAR, M.B., C.M., B.Sc., *Lecturer.*

The Class meets for two hours twice weekly, beginning on 5th January.

The Course consists of Practical Work in the Laboratory, comprising—1. The Experimental Methods employed in Pharmacological Research. 2. The Experimental Study of the Pharmacological (or Physiological) Action of Medicinal Substances.

The Course is adapted for Students who desire a Practical knowledge of Pharmacology, and for the training of Students and Graduates for Pharmacological Research.

VIII. PATHOLOGY AND MORBID ANATOMY.

PROFESSOR GREENFIELD.

This Course includes General Pathology, General Pathological Anatomy and Histology, and Systematic Morbid Anatomy :—

1. General Pathology (including General Pathological Anatomy), *i.e.*, the study of the processes of disease, &c. Under this head are considered Degenerative Processes, Inflammation, Repair, Morbid Growths, &c.

2. General Etiology is treated in fuller detail with reference to Parasitic and Infective Diseases, and includes Bacteriology and methods of bacteriological research.

3. Systematic Morbid Anatomy and Histology—a study of the more important diseases of the principal systems and organs of the body.

In illustration of the lectures, there are frequent naked eye, microscopic, and lantern demonstrations.

Practical Pathology.

Classes for Practical Instruction in Morbid Anatomy and Pathological Histology are conducted in the Pathological Laboratory—microscopes and other necessary apparatus being supplied. The Course consists of—1st. Naked Eye Demonstrations; 2nd. Histological investigation and preparation of Morbid Structures and Organs ; 3rd. Elementary Bacteriology.

In Winter the class meets five times a week, from the beginning of the Session till the end of January ; in Summer, five times a week, from the beginning of May till the end of July.

The Laboratory is also open daily from 10 A.M. till 4 P.M. for Pathological Research, under the Professor and his Assistants.

Pathological Bacteriology.

ROBERT MUIR, M.D., *Lecturer.*

The Course is a practical one, consisting of Laboratory Instruction, Demonstrations, and Lectures :—(a) *General.*—Morphology and Life History of Micro-organisms ; Preparation of Culture Media ; Methods of Isolation and Cultivation, including

Anaerobic Cultures; Methods of Staining; Separation of Bacterial Products; Inoculation, &c.

(b) *Special.*—A Systematic Study of Organisms Pathogenic to the Human Subject—their characters, their modes of producing disease, &c. A number of the more important non-pathogenic organisms are also studied.

The Course is given in Winter, but may also be given in Summer.

IX. PRACTICE OF PHYSIC.

PROFESSOR SIR THOMAS GRAINGER STEWART.

This Course comprises—

I. An account of the nature, and more particularly of the clinical characteristics, and the treatment of the different types of morbid action.

II. An account of the morbid anatomy, clinical history, causes, diagnosis, prognosis, and treatment of the diseases of the different systems and organs.

It is intended that each course shall be, as far as possible, complete; but that, while the general principles (included in Part I.) shall be fully discussed each session, the diseases of individual systems (included in Part II.) shall be taken up in different order year by year, and certain systems selected for more minute consideration.

The course is illustrated by specimens from the Anatomical Museum, and from the Professor's private collection, as well as by numerous drawings, diagrams, and charts.

Tutorial Class.

Practical instruction in connection with the Course is given to the members of the Class by the Assistant.

Text-Books.—Fagge's, Roberts's, Bristowe's, Osler's, or Frederick Taylor's "Practice of Medicine." Students are also advised to consult the Professor's "Introduction to the Study of Nervous Diseases."

MENTAL DISEASES.

THOMAS S. CLOUSTON, M.D., *Lecturer.*

This course consists of—

1. Systematic Lectures in the University during the Summer

Session on the Classification, Symptoms, Causes, and Treatment of Mental Diseases.

2. Pathological demonstrations, naked eye, lantern, and microscopic, in the University and at the Royal Asylum, Morningside, of the Morbid Anatomy of Insanity. Students will have an opportunity of original investigation in the Pathological Museum of the Asylum, under the Pathologist of the Institution.

3. Clinical instruction at the Royal Asylum, Morningside (West House), in all the forms of Mental Disease. Students have the opportunity of personally coming in contact with and examining the cases, so as to learn the modes of managing and dealing with patients labouring under Mental Disease, and they are exercised in the diagnosis of Insanity and the drawing up of certificates; the aim being to enable them to recognise its early stages, to distinguish its varieties, to adopt suitable treatment, and to advise the relatives as to sending the patient to an asylum. There is a clinical field of 500 beds, comprising all the wards except those for private patients. This part of the course extends through the Summer and the last month of the Winter Session.

4. Instruction in regard to the medico-legal, hereditary, educational, and social relations of Mental Disease, and on its bearings and significance in ordinary medical practice.

There are Free Clinical Clerkships, tenable for three months, in the Royal Edinburgh Asylum, and in several other Asylums, in connection with the class.

Text-Book.—Dr Clouston's "Clinical Lectures on Mental Diseases."

X. SURGERY.

PROFESSOR CHIENE.

Winter Session.

1. *Lectures*, 11 A.M. This course is devoted to a systematic consideration of the Principles and Practice of Surgery. Each course is intended to embrace, as far as possible, a complete view of the present aspects of the Science and Practice of Surgery.

Written examinations are held at stated periods, and at the

end of the Session a practical examination is held on the work of the Tutorial Classes.

2. *Tutorial Instruction*, at hours most convenient for the students, includes—

(*a.*) *Practical Instruction* in *Bandaging* and the *Treatment* of *Fractures* and *Dislocations* on the living subject. This class is divided into sections for Senior and Junior Students.
(*b.*) Demonstrations of Surgical Instruments and Appliances.
(*c.*) Weekly Demonstrations on the Surgery of the Eye and Ear and on Surgical Pathology, illustrated by museum specimens.
(*d.*) Weekly Revisal of the Lectures, together with Demonstrations of the Preparations in the Surgical Museum illustrative of the Lectures on Surgery.
(*e.*) Lantern Demonstrations on Surgical Pathology.

Summer Session.

The Summer Session is devoted to the Practical Aspects of Surgery. Special attention is given to Surgical Anatomy and Operative Surgery. The class meets in April, May, and June. Oral examinations and tutorial instruction in the Treatment of Fractures and Dislocations, and in the uses of surgical instruments, form a special part of the course. Special demonstrations on Surgical Pathology.

The Surgical Laboratory for (1) Surgical Pathology; and (2) Bacteriology, is open daily for original work during the Winter and Summer Sessions, under superintendence of the Professor, assisted by Harold J. Stiles, M.B. Applications to be made to the Professor.

Text-Books—Winter Session.—The Professor's "Lectures on the First Principles of Surgery." Keen and White's Text-Book of Surgery. *Summer Session.* The Professor's "Lectures on Surgical Anatomy," and Joseph Bell's "Manual of Surgical Operations," 1892; Kocher's Operative Surgery (translated by H. J. Stiles).

XI. MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

PROFESSOR SIMPSON.

The Course of Instruction comprises Lectures on—

I. Anatomy and Physiology of the Female Organs of Reproduction.

II. Physiology, Pathology, and Therapeutics of Pregnancy.

III. Parturition—Natural (Eutocia), and Morbid (Dystocia).

IV. Hygiene, Pathology, and Therapeutics of the Puerperal State.

V. Hygiene, Pathology, and Therapeutics of Infancy and Childhood.

VI. Special Pathology and Therapeutics of the Female Organs of Reproduction.

One day weekly is devoted to the Gynecological Section of the Course; and the Diseases of Women may be studied clinically in the Royal Infirmary, in the Buchanan Medical Ward, in connection with the class of Clinical Medicine.

Midwifery may be studied clinically in the Royal Maternity, of which the Professor is, *ex officio*, one of the Medical Officers, and where he attends during the first three months of the Winter Session. The Professor makes a special Clinical visit with the Students who have taken the Maternity Ticket, on Saturdays, at 10 A.M.; and he or one of the Assistant Physicians gives Clinical Instruction on Wednesday afternoons at 4 P.M.

After the Class-roll is made up, Tutorial classes are formed for Practical Instruction in the use of Obstetric and Gynecological Instruments and Appliances.

Medals and Certificates of Merit are awarded for answers at three Written Examinations held during the Session.

Summer Session.

A Course of Instruction in Obstetric and Gynecological Operations, with Demonstrations of the use of Instruments and Appliances, is conducted in the Summer Session, at 10 A.M.

On Tuesdays and Fridays the Professor gives Lectures and Demonstrations. On the other days the sections of the class are trained in the investigation and treatment of Female Diseases, and the members of the class have an opportunity of practising operations on lay figures.

Text-Books.—Playfair's, Lusk's, or Parvin's "Midwifery." The Professor's "Contributions to Obstetrics and Gynecology." Hart and Barbour's "Manual of Gynecology." Ballantyne's "Diseases of Infancy."

XII. MEDICAL JURISPRUDENCE.

PROFESSOR SIR DOUGLAS MACLAGAN.

Part I.—Medical Jurisprudence.

MEDICAL EVIDENCE GENERALLY.

(1.) Documentary—(2.) Oral (3.) Experimental—Examination of the living; identity; examination of the dead; identity; cause of death; exhumations, autopsies.

MEDICAL EVIDENCE SPECIALLY.

Questions affecting Health or Life.—(1.) Assaults and Homicide—Wounds and other external injuries; asphyxia. Starvation. Heat and cold. Poisons—(2.) Suicide—(3.) Offences against Chastity—Rape, &c.; concealment of pregnancy; criminal abortion; infanticide—(4.) Malpraxis and Neglect of Duty.

Questions affecting Civil Rights or Social States.—Marriage and Divorce. Impotence and sterility. Live birth. Survivorship. Insanity. Feigned diseases.

Part II.—Medical Police. Public Health.

HYGIENE OF INDIVIDUALS.

Man—Age and development. Sex. Constitution.

External Agencies—Food and drink. Air. Clothing. Ablutions. Exercise.

Habits and Modes of Life—Temperance. Celibacy and Marriage. Professions: learned, mechanical, criminal. Punishments. Prostitution.

Duration and Expectancy of Life—Life Assurance.

HYGIENE OF COMMUNITIES.

Sanitary Administration.—Climate—Causing disease; remedying disease.

Towns, Camps, and Private Habitations—Topographical position; water supply; heating and lighting; ventilation; drainage and sewerage.

Public Buildings.—Schools; churches; hospitals; theatres; prisons.

Cemeteries. Quarantine Establishments. Epidemics; Endemics. Disinfectants.

Text-Books. — Taylor's "Medical Jurisprudence," Guy's "Principles of Forensic Medicine," Parkes' "Practical Hygiene," Wilson's "Handbook of Hygiene," Louis Parkes' "Hygiene," Wynter Blyth's "Manual of Public Health," Whitelegge's "Hygiene and Public Health," Smith's "Laws Concerning Public Health," Vesey Fitzgerald's "Epitome of the Laws affecting Health," Newsholme's "Vital Statistics," Dykes' and Stuart's "Manual of Public Health Acts."

Public Health Laboratory.

The Laboratory comprises the Chemical Laboratory, the Bacteriological Laboratory, and a station for meteorological observations, and the examination of emanations from the soil —all open daily during the Winter and Summer Sessions, from 10 to 4, under superintendence of the Professor, assisted by Charles Hunter Stewart, D.Sc., M.B., and James Buchanan Young, M.B., D.Sc. (P.H.).

The work in these Laboratories will constitute an advanced course in the Methods of Hygienic investigation, and is intended for those preparing for the Degrees of Science in Public Health, or for the duties of Medical Officer of Health.

XIII. CLINICAL SURGERY.

PROFESSOR ANNANDALE.

The subjects of this Course are the symptoms, diagnosis, and treatment of Surgical diseases and injuries as met with in the living body, and the modifications and complications which occur in connection with them. Patients are brought before the class in the special University Clinical Theatre of the Infirmary, and their conditions are carefully examined and discussed, due regard being taken to avoid injuring their feelings or aggravating their disease. The history and nature of the case having been studied, the proper treatment is suggested and described, and carried out either then or later. Besides the regular lectures, operations are performed in the

Clinical Theatre, practical instruction at the bedside is given in the wards of the Infirmary, and on two days in the week the cases of patients attending the out-patient department are specially considered by the Assistant Surgeon, Mr Alexis Thomson, so as to instruct the students as to the minor and commoner surgical affections. Practical instruction as to the examination of patients, the observation of symptoms, the treatment of surgical emergencies, the use of instruments, the application of dressings, and other surgical details is given by the Clinical Tutor (Dr J. Wheeler Dowden) attached to the Chair, in small classes, free to all Students attending the Course.

Text-Books.—Any of the recent standard works on Surgery. Students are also advised to study some of the best works (old and new) on the special subjects of Practical Surgery.

In connection with this class it is to be noted that under the New Regulations—(1.) Nine months' attendance on Lectures is required, and it is advised that at least six months of this be continuous. (2.) That attendance at the Ward Cliniques is compulsory and forms part of the Course. (3.) Students must produce a certificate that they have acted as Dresser or Clerk in Surgical Wards for six months.

XIV. CLINICAL MEDICINE.

PROFESSORS SIR THOMAS GRAINGER STEWART, FRASER, GREENFIELD, AND (FOR DISEASES OF WOMEN), SIMPSON.

This course, consisting of Clinical Lectures and Instruction in the University wards of the Royal Infirmary, is conducted conjointly by the Clinical Professors—all being on duty both in the Winter and Summer Sessions, the Professor of Midwifery giving lectures and demonstrations on Gynecology on certain days.

The Course consists of:—1. Practical Instruction on three days a week at the bedside. 2. Critical Expositions and Discussions of cases in the lecture-room on two days a week.

Every facility is afforded to students to act as Clinical Clerks,

and those are preferred who have had a course of tutorial instruction. At the close of each Summer Session, six gentlemen, who have been members of the Class, are appointed Resident Physicians in the Clinical Wards for the following Winter and Summer Sessions.

Clinical Tutorial Class.

Practical instruction in the Methods of Physical Examination is given to the Class by the University Clinical Tutors.

Junior Students are strongly advised to take this course of instruction along with their first course of Clinical Medicine.

CLINICAL INSTRUCTION ON DISEASE IN CHILDREN.

JAMES CARMICHAEL, M.D., JOHN PLAYFAIR, M.D., *Lecturers.*

Two Courses, each of three months, will be conducted annually, one in the Winter, and one in the Summer Session.

The instruction is given in the wards of the Royal Hospital for Sick Children. Special attention is directed to Hygiene, Diagnosis, and Treatment during the period of Infancy.

Works of reference.—Keating's "Cyclopædia of the Diseases of Children," Henoch or Eustace Smith on "Disease in Children."

Text-Book.—Carmichael's "Manual of Disease in Children."

DISEASES OF THE EYE.

GEORGE ANDREAS BERRY, M.B., *Lecturer.*

The course will consist of systematic lectures, and of clinical instruction at the Royal Infirmary.

As new arrangements in connection with this Course are still under consideration, the decision of the University Court will be advertised at the beginning of the Summer Session.

Text-Books.—Berry's "Diseases of the Eye," Swanzy's "Handbook on Diseases of the Eye," Nettleship on "Diseases of the Eye," Fuch's "Text-Book of Ophthalmology."

Class Prize and Honours Lists.

SUMMER SESSION, 1895.

BOTANY.

First-Class Honours.—1. Charles Chilton, New Zealand; 2. W. J. Barclay, New Zealand; and J. A. Macdonald, M.A., Leith—equal; 4. D. Macrae Aitken, Singapore; 5. G. H. Hanna, Jamaica (*Medallists*); 6. R. T. Currall, Leith; 7. R. V. Clark, Edinburgh; 8. W. Wallace, England; 9. Harvey Baird, Perth; W. J. D. Bromley, Lancaster; B. H. Goldsmith, Douglas, Isle of Man; W. G. Mason, England; F. D. Simpson, Bathgate; and G. Reynolds Turner, London—equal.

Second-Class Honours.—15. L. Bruce, Brechin; Ed. Ewart, Liberton; W. Mair, Edinburgh; and W. G. Porter, Cumbaconum—equal; 19. Tasman J. G. Wilson, Tasmania; 20. S. A. Ballantyne, Pettinain; C. E. Fawsitt, Glasgow; and W. Mackay, New Zealand—equal; 23. George A. Davidson, Stranraer; 24. John Ross, Whitburn; 25. J. Dalgleish Anderson, Moffat; 26. A. Preston, Yorkshire; and R. G. Thomson, Buckhaven—equal; 28. H. E. Gibbs, New Zealand; and C. E. Southon, N.-W. Provinces—equal; 30. B. H. Stanley Aylward, Yorkshire; Y. Fukuda, Japan; H. J. M'Lean, Timain; and R. B. Turnbull, Ross-shire—equal; 34. Gavin Grey, Edinburgh, and F. Young, M.A., Kirkcaldy—equal; 36. A. J. Baird, Port Glasgow; J. D. Fergusson, England; P. S. Hardie, Edinburgh; R. F. Jardim, British Guiana; C. B. M'Conaghy, India; H. M. Mackenzie, Scotland; and R. Sproule, Ireland—equal; 43. P. W. Hampton, Ramsey, Isle of Man; and J. G. Jack, Edinburgh—equal; 45. J. Anderson, Scotland; C. Fraser, Inverness; and I. K. Hermon, Brechin—equal; 48. L. Laurie, Worcester; and A. Whyte, Easdale—equal; 50. R. R. Fasson, Edinburgh; J. A. Gray, Ajmere; C. E. Legat, Musselburgh; E. A. Nobbs, Edinburgh; J. O. Peet, England; and E. M'K. Young, Kinross—equal; 56. A. A. Martin, New Zealand; and Wm. Reid, Montrose—equal; 58. J. A. Balck, Rostock; 59. J. B. Cassels, India; J. Jamieson, Edinburgh; T. A. Mackenzie, Edinburgh; and J. M. A. Macmillan, Edinburgh—equal.

PRACTICAL BOTANY.

Class A.

First-Class Honours.—1. William Wallace, England; 2. Edward Ewart, Liberton; and Yoshinobu Fukuda, Japan—equal (*Medallists*); 4. G. H. Hanna, Jamaica; and E. J. Peill, Madagascar—equal; 6. D. Macrae Aitken, Singapore; 7. J. Dalgleish Anderson, Moffat; and A. M. Holmes, England—equal; 9. W. Mair, Edinburgh.

SECOND-CLASS HONOURS.—10. T. H. W. Alexander, Perth; J. M. Benson, Sheffield; P. P. Ganteaume, Trinidad; T. A. Mackenzie, Edinburgh; and A. W. Nankervis, Australia—equal; 15. R. R. Fasson, Edinburgh; C. E. Fawsitt, Glasgow; G. Mackie, Montrose; and A. E. M'K. Young, Kinross—equal; 19. W. E. Mason, England; 20. P. C. Campariole, Trinidad; R. T. Currall, Leith; S. A. Ballantyne, Pettinain; E. A. Loch, India; and B. K. Goldsmith, Douglas, Isle of Man—equal; 25. D. B. Merry, Edinburgh.

CLASS B.

FIRST-CLASS HONOURS.—1. Charles Chilton, New Zealand; 2. P. W. Hampton, Ramsey, Isle of Man (*Medallists*); 3. G. Reynolds Turner, London; 4. D. C. L. Fitzwilliams, Wales; and G. Porter, Cumbaconum—equal; 6. J. Drummond Fergusson, England; 7. Wm. M'Kay, New Zealand, and D. W. Smith, London—equal.

SECOND-CLASS HONOURS.—9. W. J. Barclay, New Zealand; H. A. H. Gilmer, New Zealand; Charles E. Legat, Musselburgh; and H. M. Mackenzie, Scotland—equal; 13. Launcelot Bruce, Brechin; and P. A. Maclagan, Edinburgh—equal; 15. F. D. Simpson, Bathgate; W. R. E. Williams, Wales; and Tasman J. G. Wilson, Tasmania—equal; 18. W. C. Macdonald, Dunedin; John Ross, Whitburn; and R. A. Ross, South Africa—equal; 21. J. B. Cassels, India; Gavin Grey, Edinburgh; and Arthur Preston, Yorkshire—equal.

FOR MICROSCOPICAL PREPARATIONS MADE DURING THE SESSION.

FIRST-CLASS HONOURS.—1. Charles Chilton, New Zealand; and G. Reynolds Turner, London—equal; 3. William Mair, Edinburgh (*Prizes*); 4. G. H. Hanna, Jamaica; 5. William Brown, Scotland; R. V. Clark, Edinburgh; and Arthur Preston, Yorkshire—equal.

SECOND-CLASS HONOURS.—8. J. M. L. Brown, Airdrie; J. Wishart Kerr, Culross; T. C. Lauder, Ireland; and William Wallace, England—equal; 9. C. E. Legat, Musselburgh; 10. T. C. Mackenzie, China; 11. E. A. Nobbs, Edinburgh.

FOR DRAWINGS ILLUSTRATING WORK DONE DURING THE SESSION.

FIRST-CLASS HONOURS.—1. William Wallace, England; 2. A. B. Flett, Edinburgh (*Prizes*); 3. Charles P. Ball, Yorkshire; and G. A. Lowther, Jubbulpore—equal.

SECOND-CLASS HONOURS.—5. T. C. Lauder, Ireland; 6. G. H. Hanna, Jamaica.

FOR HERBARIUM OF BRITISH PLANTS.

Robert Main, Monymusk (*Gold Medal*).

ISAAC BAYLEY BALFOUR, M.D., D.Sc., *Professor.*

ZOOLOGY.

First-Class Honours.—1. John Jeffrey and Arthur Preston—equal (*Medallists*); 3. Frank Young, M.A.; 4. John G. Jack; 5. Edward Ewart; 6. T. J. G. Wilson.

Second-Class Honours.—7. S. Mallanah; 8. H. J. M'Lean; 9. T. N. Annandale; 10. L. Lawrie, A. W. Nankervis, and W. G. Porter—equal; 13. H. E. Gibbs and B. K. Nariman—equal; 15. John Jamieson and C. E. Legat—equal; 17. John Balck, H. A. H. Gilmer, E. A. Nobbs, and T. S. A. Orr—equal; 21. W. G. Mason and J. M. A. Macmillan—equal.

J. BEARD, D.Sc., *Lecturer.*

PRACTICAL ZOOLOGY.

First-Class Honours.—1. W. J. D. Bromley (*Medal*); 2. A. Preston; 3. G. G. Cumming and H. J. M'Lean—equal; 5. E. Ewart and A. W. Nankervis—equal.

Second-Class Honours.—7. E. T. Melhuish; 8. Frank Young, M.A.; 9. A. J. Baird; 10. G. Grey; 11. T. C. Pritchard and T. J. G. Wilson—equal; 13. J. D. Anderson and B. K. Nariman—equal.

J. C. EWART, M.D., *Professor.*

PRACTICAL CHEMISTRY.

First-Class Honours.—1. John Jeffrey, Jedburgh (*Medallist*); 2. B. J. Courtney, Altrincham; 3. W. J. Jones, Wrexham; and J. Thornhill, Cork—equal; 5. L. O. Critchley, Inverness; 6. John F. Cameron, Perthshire; 7. John M. Macdonald, Edinburgh.

Second-Class Honours.—8. Andrew C. Brown, Cheshire; 9. Peter Drummond, Edinburgh; 10. E. M. Horsburgh, Edinburgh; 11. W. G. Mason, Birmingham; 12. J. W. Falconer, Edinburgh; and William Purves, Caithness—equal; 14. A. Cartner, Queensland; 15. S. Mallanah, India; 16. A. J. Spiganovicz, Odessa; 17. J. E. Ratcliffe, Accrington; 18. J. A. Macdonald, Inverness.

ALEX. CRUM BROWN, M.D., *Professor.*

PHYSICS.

First-Class Honours.—1. W. J. D. Bromley; and 2. W. Maxwell (*Medallists*); 3. G. Mackie; 4. W. J. Barclay; 5. H. M. Mackenzie; 6. D. H. MacGregor; 7. R. Hamilton and W. Park—equal; 9. J. Jeffrey and R. A. Ross—equal; 11. H. C. Duncan, I. K. Hermon, G. Maclennan, and C. E. Southon—equal; 15. R. R. Fasson, W. H. Fraser, T. A. Mackenzie, and T. R. Robertson—equal; 19. G. S. Carey, R. D. Hudson, and R. G. Thomson—equal.

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P. G. TAIT, M.A., *Professor.*

PRACTICAL ANATOMY.

SENIOR STUDENTS.

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JUNIOR STUDENTS.

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Liverpool; W. P. Meldrum, Mauritius; and T. S. Shepherd, Wigan—equal; 34. B. J. Courtney, Altrincham; and G. B. Pemberton, Dublin—equal; 36. Thomas Livingstone, Stanhope; Peterswald Pattison, Edinburgh; J. A. Raeburn, Dollar; and A. B. Slater, Leeds—equal; 40. F. de L. Myers, Jamaica; 41. A. G. Hamilton Chester; and E. C. Maddock, Toronto.

SECOND-CLASS HONOURS.—43. James Monroe, Scotland.

WM. TURNER, Kt., M.B., D.C.L., *Professor.*

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burgh; W. Lockerbie, Edinburgh; G. A. Mackay, Durham; B. C. Myers, New Zealand; F. Porter, Scotland; and A. K. Traill, India—equal; 80. R. M. Dalziel, India; P. H. Macdonald, Leith; and J. A. C. Smith, St Nicholas—equal; 83. J. M. Campbell, Montrose; J. M. Macdonald, Edinburgh; and G. C. M'Leavy, Co. Down—equal; 86. W. Craig, Kelso; A. G. Hamilton, Chester; H. C. Keun, Singapore; T. P. Oates, Cape Colony; and W. E. Tellet, Bridge-of-Allan—equal; 91. W. Darling, Edinburgh; and J. Leggate, Holytown—equal; 93. T. B. Gornall, Preston; G. Haddow, Scotland; and D. B. King, Fifeshire—equal; 96. J. Hunter, Dumfriesshire; 97. G. de Labat, Cape Colony; and C. S. Vartan, Nazareth—equal; 99. A. E. Goldie, Jamaica; W. W. Thom, Blairgowrie; and J. A. Thompson, Wigtownshire—equal; 102. J. Orr, Hawick; 103. M. L. Dhingra, India; A. Dods, Dalkeith; M. A. Ghany, India; W. D. S. Harrison, Banton; W. R. Macdonald, Edinburgh; and H. Wade—equal.

W. RUTHERFORD, M.D., *Professor.*

PRACTICAL MATERIA MEDICA.

First-Class Honours.—1. Robert F. M'Nair Scott, B.A., Singapore; 2. Gerrit de Labat, Cape Colony; 3. George Lyon, Argyllshire (*Medallists*); 4. David Elliot Dickson, Blairgowrie.

Second-Class Honours.—5. Alfred T. Gailleton, Perth; Andrew Gilmour, Edinburgh; and James M. Reid, Edinburgh—equal; 8. John D. Comrie, Scotland; Archibald C. M'Gilchrist, M.A., Islay; and Ernest C. Peake, Madagascar—equal; 11. Balfour S. Hyslop, Leven; and Thomas J. T. M'Hattie—equal; 13. Ernest F. Bashford, Cheshire; Robert Cameron, Crieff; and George Dick, Wick—equal; 16. William N. Barker, Cupar-Fife; and John W. Struthers, Edinburgh—equal; 18. Stanley Branch, West Indies; 19. William Moncrieff Paul, M.A., Dollar; and Robert J. Dick, Dunbar—equal; 21. George H. W. Robertson, Edinburgh; George E. Twigge-Molecey, Bombay; and Græme Hamilton, Ashton-under-Lyne—equal; 24. J. Spencer Low, Yorkshire; Edward M'Culloch, Edinburgh; and Charles M. Pearson, Edinburgh—equal; 27. John R. Anderson, Orkney; Robert William M'Kenna, Dumfries; and Alfred C. Sandstein, New Zealand—equal; 30. Charles Forsyth, Glasgow; Thomas R. Matthews, Jamaica; and William Thomson Shannon, Liverpool—equal; 33. Alexander Goodall, Ayrshire; and George A. Rorie, Dundee—equal; 35. Hugh M'Calman, Tarbert; and George F. B. Simpson, Edinburgh—equal; 37. Henry Wade, Falkirk; 38. Robert W. T. Ewart, Dumfriesshire; John H. Gordon, Mid-Lothian; Albert A. Gunn, Strathpeffer; George E. J. King, Cheltenham; and Ernest W. Lewis, India—equal; 43. D. V. N. Adams, Lanark; Francis J. Gray, Scotland; William Bell,

Barrow-in-Furness; and James W. Mathewson, Dunfermline—equal; 47. Frederick A. Barnardo, India; Alexander Dingwall Fordyce, Edinburgh; Miles Johnston, Uruguay; William M'Kay; James F. Martin, Limerick; William P. Meldrum, Mauritius; and James T. P. Heatley, Northumberland—equal.

THOMAS R. FRASER, M.D., *Professor.*

PRACTICAL PATHOLOGY.

SENIOR DIVISON.

First-Class Honours.—1. R. H. Walter, Somerset; 2. G. L. Chiene, Edinburgh.

Second-Class Honours.—3. G. Scott Brown, Edinburgh.

JUNIOR DIVISION.

First-Class Honours.—1. George Lyon, Argyllshire; and A. C. M'Gilchrist, M.A., Islay—equal (*Medallists*); 3. J. D. Slight, Portobello; and W. R. Somerset, Derbyshire—equal; 5. John Malcolm, Caithness; 6. Patrick Kinmont, Scotland; and J. W. Struthers, Edinburgh—equal; 8. Thomas Biggam, Wigtownshire; D. E. Dickson, Blairgowrie; and R. W. T. Ewart, Dumfriesshire—equal; 11. C. M. Cooper, Somerset, and F. W. More, Caithness—equal; 13. T. R. W. Armour, Edinburgh; and A. G. Carment, India—equal; 15. B. C. B. Aldren, Malvern; and J. S. Fraser, Cupar—equal; 17. W. Hamilton, Middlesborough; and A. H. Pirie, Dundee—equal; 19. Wm. Burns, Forfarshire; 20. G. W. Miller, Dundee.

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W. S. GREENFIELD, M.D., *Professor.*

OPERATIVE MIDWIFERY AND GYNECOLOGY.

First-Class Honours.—1. Walter W. Chipman, Canada (*Medallist*); 2. William Lillie, India; 3. D. J. Graham, Scotland; 4. John

Macmillan, Edinburgh; 5. S. J. Aarons, Sydney, N.S.W.; 6. George R. Livingston, Edinburgh.

SECOND-CLASS HONOURS.—7. D. Ritchie Dewar, Northumberland; 8. J. Ogilvie Veitch, Kirkliston; 9. L. V. Laurie, Burntisland.

A. R. SIMPSON, M.D., *Professor.*

MEDICAL JURISPRUDENCE.

FIRST-CLASS HONOURS.—1. Stuart M'Donald; 2. Percy T. Herring; and R. K. Howden (*Medallists*); 4. Thomas Biggam; 5. A. J. W. Buchanan; and William H. Robb—equal; 7. David R. Rowlands; 8. C. M. Cooper; 9. John Malcolm; 10. R. W. Anthony; 11. J. D. Slight; 12. William Burns.

SECOND-CLASS HONOURS.—13. Patrick Kinmont; and George B. Serle—equal; 15. S. Mallanah; J. A. Milroy; and H. Young Taylor—equal; 18. Arthur Dickson; 19. William Finlay; William Mowat; and W. W. Wood—equal; 22. F. W. More; 23. George A. Vincent; 24. D. D. Gold; William Hamilton; and Frank M. Willcox—equal; 27. Gilbert A. Welsh; 28. W. Martin; 29. W. M. A. Smith; 30. J. F. Falconer; 31. R. M. Hall; 32. A. B. MacCarthy; and Edwin Matthew—equal; 34. J. C. Hastings; 35. J. D. S. Milln; 36. W. G. Heath; and Thomas B. Shoolbread—equal; 38. A. J. Ryle; 39. W. J. Veecock; 40. William H. Hill; William W. Maxwell; and A. G. Worrall—equal; 43. W. S. Eaton; 44. C. H. Phillips; 45. James Cappie; C. M. Robertson; and "Sanitas"—equal; 48. T. N. Johnston; 49. H. Belasco; H. F. Boland; T. J. T. M'Hattie; and Robert G. Riddell—equal; 53. D. Clow and W. R. Somerset—equal; 55. T. M. Callander, W. J. H. Hislop, G. B. Hollings, and J. A. Shoolbread—equal; 59. James Donaldson; 60. R. C. Cunningham; 61. Charles D. Lauder; 62. A. J. T. Allan; John M'Gibbon; and Alfred E. Williams—equal; 65. James Forrest; 66. A. E. Brookes.

DOUGLAS MACLAGAN, Kt., M.D., *Professor.*

MENTAL DISEASES.

FIRST-CLASS HONOURS.—1. Thomas Yeates, M.B.C.M. (*Medallist*); 2. David James Graham; and David Orr, M.B.C.M.—equal; 4. W. J. Penfold; and A. P. Low—equal; 6. A. H. Edwards; Thomas Grainger; and A. C. Sturrock, M.A.—equal; 9. John R. Lord; 10. George M'Kellar and R. J. Ralston—equal.

SECOND-CLASS HONOURS.—12. Walter H. Cox; 13. A. D. Yule.

T. S. CLOUSTON, M.D., *Lecturer.*

DISEASES OF THE EYE.

FIRST-CLASS HONOURS.—1. J. T. Hewetson, Cumberland; 2. John A. Hunter, Belfast (*Medallists*); 3. A. Corsar Sturrock, Linlithgow; and James Bannerman, Southport—equal; 5. W. E. M'Kechnie, South Africa; 6. Arthur Dickson, Montrose; 7. A.

D. Yule, Forfarshire; 8. "Nil Desperandum"; A. P. Low, Arbroath; R. W. Anthony, India; and F. O. N. Mell, India—equal.

Second-Class Honours.—12. William Mowat, Haddington; 13. T. H. Stevenson, Ireland; 14 Robert Thornton, Arbroath; 15. Francis A. Hardy, Nottingham.

D. ARGYLL ROBERTSON, M.D., *Lecturer.*

WINTER SESSION, 1895-96.

CHEMISTRY.

Robert Wilson Memorial Prize. Alan W. C. Menzies. *Proxime Accessit.*—Charles E. Fawsitt.

First-Class Honours.—1. Charles E. Fawsitt, Glasgow; and Alan W. C. Menzies, Edinburgh—equal; 3. J. H. Harvie Pirie, Aberdeenshire; 4. James M. Low, Leith; 5. Alexander Trotter, Perth; 6. E. M. Anderson, Falkirk (*Medallists*); 7. Alexander Bain, Lauder; James Lornie, Perth; and William Mair, Edinburgh—equal; 10. S. A. Ballantine, Thankerton; 11. G. S. Carmichael, Edinburgh; 12. J. Gordon M'Dougall, Montrose; 13. J. C. Leighton, Dundee; and H. Mason, Barnsley—equal; 15. H. Oswald Smith, Edinburgh; 16. Robert Affleck, Scotland; David F. Chalmers, Gillespie; and William Girdwood, South Africa—equal; 19. R. A. Ross, Cape Colony; and Matthew A. Swan, Paisley—equal; 21. A. R. Johnston, Forfar; N. Patterson, Ancrum; and George W. Profeit, Balmoral—equal; 24. A. B. Black, Madras; and Langworthy Laurie, Worcester—equal; 26. Charles E. Legat, Edinburgh; 27. John M. Macdonald, Edinburgh; and W. G. Porter, Madras—equal; 29. C. B. M'Conaghy, Devonshire; and Arthur M. Wood, Leith—equal; 31. D. Heron, County Down; 32. C. W. Walker, Fife.

Second-Class Honours.—33. John O. Peet, England; and John Ross, Edinburgh—equal; 35. A. C. N. M'Hattie, West Indies; William Purves, Portree; F. T. Thompson, Portobello; J. A. L. Wallace, Turriff; George Wilson; and Frank Young, Kirkcaldy—equal; 41. William Wallace, Berwick-on-Tweed; 42. Edward B. Jamieson, Shetland; 43. T. H. W. Alexander, Perth; H. H. Bishop, Trinidad; Edward Ewart, Moffat; G. Lewis Thompson, Mauritius; and G. Wright, Whitehaven—equal; 48. Henry H. Simpson, Virginia, U.S.A.; and Tasman J. G. Wilson, Tasmania—equal; 50. W. E. Carnegie Dickson, Edinburgh; and J. S. Enslin, Cape Colony—equal; 52. W. A. Adam; L. Bruce, Brechin; Frederick Hardie; J. M. A. Macmillan, Edinburgh; G. W. P. Maitland, India; and J. Brownlee Milne, Montrose—equal. 58. John Jamieson, Edinburgh; D. MacKnight; J. C. Parker,

Alloa; C. B. Balfour Paul, Edinburgh; and William S. Scott, Bonnyrigg—equal; 63. Lesley N. Biggs, Edinburgh; T. Henderson; R. G. Leach, Rochdale; S. Rattray, Edinburgh; and J. H. Thornley, Cumberland—equal; 68. E. M. Horsburgh, Edinburgh; D. Menzies, Dunkeld; and C. F. Noble, Inverness—equal; 71. J. P. Douglas; G. H. Lewis, S. Wales; and J. G. MacKenna, Dumfries—equal; 74. P. H. Guthrie; 75. J. Duncan, Scotland; Alexander Fraser, Elginshire; J. G. S. Jamieson, Ayr; Robert Sproule, Australia; and A. W. Wilson, Lincoln—equal; 80. P. S. Haldane; E. C. C. Maunsell; A. L. Nestor, Trinidad; H. C. Nixon, Leek; J. R. Prytherch, Anglesey; J. F. Selkirk, Edinburgh; and F. D. Simpson, Bathgate—equal; 87. Andrew Fleming, Edinburgh; R. Hamilton, Yorkshire; T. A. MacKenzie, Edinburgh; James Munro, Dornoch; J. K. A. Robertson, Greenock; William C. Ross, Edinburgh; and S. R. Sibbald, Edinburgh—equal; 94. J. P. Campbell, Aberdeenshire; S. H. Gibbon, Trinidad; and J. Strachan, Edinburgh—equal; 97. H. E. Arbuckle; Arthur A. Martin, New Zealand; and G. Duncan Whyte, London—equal; 100. Arthur D. Spence, Montrose; 101. N. E. Harding, Liverpool; J. T. Kirkwood, Sussex; and F. Burnett Stuart, Edinburgh—equal; 104. Francis K. Kerr, Leith; 105. Alex. J. Baird, Port-Glasgow; Charles Fraser; H. J. M'Lean; A. M. Malcolmson, Leith; and H. Crichton Miller, Genoa—equal; 110. J. D. Anderson, Moffat; John H. Bell; A. Brydon, Jedburgh; W. I. Dunn; Sidney R. Ellis; P. Pattison, Edinburgh; and Robert Thompson, Coleraine—equal.

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First-Class Honours.—1. Alan W. C. Menzies, Edinburgh; J. H. H. Pirie, Aberdeenshire; 3. J. Gordon M'Dougall, Montrose; and William Wallace, Berwick-on-Tweed—equal (*Medallists*); 5. G. S. Carmichael, Edinburgh; and G. H. Hannah—equal; 7. James M. Low, Leith; William Mair, Edinburgh; C. W. Walker, Fife; Norman S. Wells, Burma; and A. M. Wood, Leith—equal; 12. John Ross, Edinburgh; and M. A. Swan—equal; 14. S. A. Ballantyne, Thankerton; C. E. Legat, Edinburgh; and R. A. Ross, Cape Colony—equal; 17. D. Heron, County Down; and C. B. Balfour Paul, Edinburgh—equal; 19. Garnett Wright, Whitehaven; 20. T. H. W. Alexander, Perth; and H. Bishop—equal; 22. A. D. S. Cooke, Calcutta; J. Lornie, Perth; J. B. Milne; G. L. Thompson, Mauritius; and J. A. L. Wallace, Turriff—equal; 27. E. M. Anderson; A. B. Black, Madras; J. S. Enslin, Cape Colony; George Wilson, Berwickshire; and Frank Young, Kirkcaldy—equal; 32. J. P. Douglas, Lockerbie; L. Laurie, Worcester; and Aleck Trotter, Perth—equal; 35. F. Hardie; 36. E. B. Jamieson, Shetland; and D. MacKnight, Whitburn—equal; 38. J. A. Black; and L. Bruce, Brechin—equal; 40. E.

Ewart, Moffat; John Jamieson; and L. C. Peel Ritchie, Edinburgh—equal; 43. A. R. Johnston, Forfar; R. G. Leach, Rochdale; and J. Strachan, Edinburgh—equal; 46. T. A. Davies; 47. W. E. Frost, Limerick; R. Hamilton, Bradford; D. M. Macrae, Stornoway; W. S. Scott, Bonnyrigg; J. H. Thornley, Cumberland; and T. J. G. Wilson—equal; 53. J. G. MacKenna, Dumfries; A. L. Nestor, Trinidad; C. F. Noble, Inverness; W. G. Porter; G. W. Profeit, Balmoral; F. G. Ralston; and H. H. Simpson—equal.

Second-Class Honours.—60. G. S. Carey, Guernsey; W. E. M'Farlane, Edinburgh; and A. W. Wilson, Lincolnshire—equal; 63. H. E. Arbuckle, Natal; W. E. C. Dickson, Edinburgh; P. S. Haldane, Bridge-of-Allan; and A. C. N. M'Hattie, West Indies—equal; 67. G. F. Buist and James Wallace—equal; 69. A. D. Spence, Montrose; and F. M. Wigg, Australia—equal; 71. H. Alexander, Cookstown; and L. P. Brassey—equal; 73. J. G. S. Jamieson, Ayr; W. Macdougall, Morayshire; H. J. M'Lean, New Zealand; H. Mason; James Munro, Dornoch; N. Patterson, Ancrum; and F. D. Simpson, Bathgate—equal; 80. Andrew Fleming, Edinburgh; and G. R. Turner, London—equal; 82. J. Lindsay, Edinburgh; T. A. Mackenzie, Edinburgh; and C. Heron Watson, Edinburgh—equal; 85. J. P. Campbell, Aberdeenshire; J. M. A. Macmillan, Edinburgh; and G. D. Whyte, London—equal; 88. G. W. P. Maitland, India, and William C. Ross—equal; 90. B. G. Forman; and H. C. Miller, Genoa—equal; 92. B. H. S. Aylward; W. J. Collis; A. Frew, Kilmarnock; F. F. C. Jagger; R. C. Monnington; J. C. Parker, Alloa; J. B. Primmer, Dunfermline; and J. R. Prytherch, N. Wales—equal; 100. Norman Glegg; and J. K. A. Robertson, Greenock—equal; 102. C. M. Anderson; and A. Brydon, Jedburgh—equal; 104. A. R. Douglas, Arbroath; J. T. Kirkwood; R. A. Savage, Lagos; and R. Thompson, Coleraine—equal; 108. Sidney R. Ellis; G. A. P. Ross, Ross-shire; and C. E. Southon—equal; 111. P. D. Cremona; C. Fraser, Edinburgh; and S. R. Sibbald—equal; 114. J. D. Anderson, Moffat; W. P. Cormack, Tain; R. Horn; A. A. Martin, New Zealand; H. D. Shepherd; and H. T. Wolfenden—equal; 120. J. M. L. Brown; W. Eadie, Cumberland; Gavin Forrest; H. C. Nixon; and H. M. Speirs, Haltwhistle—equal; 125. P. H. Guthrie; R. Ingles, Crieff; G. H. Lewis; C. E. Pepper, Salisbury; H. M. Roberts; and J. M. Young—equal; 131. A. J. Baird; A. W. Fuller, Maidenhead; F. K. Kerr, Leith; K. D. Melville, Edinburgh; and Allan S. Watson—equal; 136. A. A. Ayton; and D. J. Roberts, Carnarvon—equal; 138. D. Fitzwilliams; J. A. Gray; J. F. Selkirk; and P. Weatherbe—equal; 142. W. A. Cowan; J. H. M'Kee; L. A. Macmunn; A. J. Williamson, Haddington; and J. H. Wrightson—equal.

ALEX. CRUM BROWN, M.D., *Professor.*

ELEMENTARY ZOOLOGY.

First-Class Honours.—1. R. A. Ross; 2. G. P. W. Maitland; 3. G. S. Carmichael (*Medallists*); 4. Wm. Mair and A. A. Martin—equal; 6. J. G. M'Kenna; 7. James Dalzell and D. Menzies—equal; 9. T. H. W. Alexander; 10. R. Hamilton and H. D. Shepherd—equal.

Second-Class Honours.—12. J. B. Milne, F. D. Simpson, G. R. Turner—equal; 15. R. Sibbald; 16. Robert Affleck, Scotland; 17. J. M. L. Brown; 18. A. S. Frank, W. E. Herbert, and W. S. Scott—equal; 21. J. P. Douglas; 22. J. P. Fleming; 23. J. G. S. Jamieson, E. B. Jamieson, and K. D. Melville—equal; 26. Norman Glegg and R. G. Leitch—equal; 28. P. C. Rayner; 29. G. Wilson; 30. W. J. Dunn and H. C. Nixon—equal; 32. A. Fleming, R. Inglis, and A. M'Ewan—equal; 35. E. H. Gibbon and D. Heron—equal; 37. G. S. Carey, A. R. Douglas, J. G. M'Dougall, and Wm. Wallace—equal; 41. E. M. G. Jayne. T. A. Mackenzie had 60 per cent. in one exam.

PRACTICAL ZOOLOGY.

First-Class Honours.—1. H. D. Shepherd (*Medallist*).

Second-Class Honours.—2. T. H. W. Alexander and J. P. Douglas—equal; 4. G. S. Carmichael, Norman Glegg, E. B. Jamieson, James Jamieson, and G. A. Park Ross—equal; 9. W. Mair, Geo. S. Steven, and Noel N. Wade—equal.

J. C. EWART, M.D., *Professor.*

PHYSICS.

First-Class Honours.—1. M. A. Swan, Paisley (*Medal*); 2. A. Trotter, Perth (*Medal*); 3. A. M. Wood, Leith; 4. T. J. G. Wilson, Tasmania; 5. John Duncan and J. C. Gilchrist, Dumfries—equal; 7. A. B. Black, Madras. Sara L. M'Elderry, who was unable to attend the First Examination, obtained the highest marks (92 per cent.) in the Second Examination.

Second-Class Honours.—8. W. Macdougall, Rothes, Morayshire; 9. G. Wright; 10. S. A. Ballantyne, Pettinain; 11. O. C. Bradley; 12. F. Hardie; 13. N. Patterson, Ancrum; 14. Janet A. S. Mouat, Haddington; 15. J. P. Douglas, Dumfriesshire; 16. D. Fitzwilliams; and R. Imrie, Galloway—equal; 18. J. Shields, East Lothian; 19. W. E. Frost, Limerick; and G. H. Lewis—equal; 20. H. E. Arbuckle, Natal; and J. Jamieson, Edinburgh—equal; 22. E. Ewart; 23. D. S. Macknight and J. R. Prytherch, Wales—equal; 25. J. H. M'Kee, Belfast; 26. J. T. Kirkwood, Worthing; and R. G. Leach—equal; 28. W. Brown; G. F. Buist, Edinburgh; L. Laurie, Worcester; and C. B. Balfour Paul, Edinburgh—equal.

C. G. KNOTT, D.Sc., *Lecturer.*

SENIOR PRACTICAL ANATOMY.

First-Class Honours.—1. J. A. Murray, B.Sc., Mid-Lothian; A. C. M'Gilchrist, M.A., Islay; A. C. Sandstein, New Zealand; and R. F. M'Nair Scott, B.A., Singapore (*Medallists*)—equal; 5. William Lockerbie, Edinburgh; and J. Martin Reid, Edinburgh—equal; 7. J. R. Anderson, Orkney; and J. H. Rhodes, Kendal—equal; 9. S. H. Branch, West Indies; Duncan Forbes, Perth; A. Dingwall Fordyce, Edinburgh; J. M'A. Fraser, Nova Scotia; G. E. J. King, Cheltenham; E. G. C. Maddock, Canada; and D. B. Waters, Wick—equal; 16. James Allison, Carstairs; C. A. B. Horsford, West Indies; Robert Gibson, Port William; E. W. Lewis, India; J. C. M'Conaghy, India; D. V. M'Intyre, Dundee; and W. Carlyle Wilson, M.A., Crieff—equal; 23. John Alcindor, Trinidad; R. J. Dick, Dunbar; George Lyon, Argyllshire; W. C. MacDonald, New Zealand; and Alfred Shearer, Orkney—equal; 27. W. N. Barker, Fifeshire; R. N. Brebner, Canada; Robert Crawford, Bradford; R. W. T. Ewart, Moffat; Alexander Fordyce, Fauldhouse; H. T. Holland, Cornhill-on-Tweed; R. W. Mackenna, Dumfries; and Henry Wade, Falkirk—equal; 35. J. M. Cuthbert, Scotland; W. P. Meldrum, Mauritius; W. Moncrieff Paul, M.A., Dollar; J. A. Raeburn, Dollar; and J. A. Shoolbread, England—equal; 40. William Bell, Barrow-in-Furness; J. V. Fox, Lancashire; J. M. Gray, Perthshire; B. E. Myers, New Zealand; C. M. Pearson, Edinburgh; and Isidore E. Rosenstein, Cairo—equal; 46. C. S. Brebner, Darlington; William Craig, Kelso; L. J. M. Deas, India; Andrew Gilmour, Edinburgh; B. S. Hyslop, Leven; G. B. Pemberton, Dublin; Robert Pugh, Wales; G. O. Rowley, Shropshire; and W. E. Tellett, Bridge-of-Allan—equal; 55. E. R. Branch, West Indies; Robert Cumming, Montrose; Charles Forsyth, Glasgow; A. T. Gailleton, Perth; Robert Gellatley, Manchester; A. G. Hamilton, Chester; Græme Hamilton, Ashton-under-Lyne; and J. W. Mackenzie, Inverness—equal; 63. George Dick, Wick; and F. J. Jude, Australia—equal; 65. J. Spencer Low, Yorkshire; Edward M'Culloch, Edinburgh; Robert Ritchie, Edinburgh; William Tarr, Somerset; and G. J. Young, Yorkshire—equal; 70. J. G. Bell, Australia; Robert Bruce, Edinburgh; A. F. Perigal, Wheatley; G. A. Rorie, Dundee; and G. F. B. Simpson, Edinburgh—equal; 75. D. V. M. Adams, Lanark; Alexander Goodall, Ayrshire; A. M'W. Green, Skye; W. J. Jones, Wales; and James Monroe, Edinburgh—equal; 80. E. B. Anderton, Lancashire; and P. G. Leeb du Toit, Cape Colony—equal; 82. T. E. Hincks, Wales; John Mackenzie, Inverness; and A. H. Wood, Falkland—equal; 85. F. J. H. Bateman, Norwich; and E. M. Lithgow, India—equal; 87. Ignatius Crook, Ulverston; and C. L. Dunn, Valparaiso

—equal; 89. W. E. J. Wallis, Hampshire; 90. Arthur Whittome, March.

SECOND-CLASS HONOURS.—91. E. G. Ffrench, Jamaica; and James Leggate, Holytown—equal; 93. Andrew Thomson, Wigtonshire; 94. P. A. Leighton, Portobello; 95. H. A. H. Gilmer, New Zealand; and C. W. Spooner, Dorset—equal; 97. Ivie Aird, Lockerbie; and Evariste Laval, Edinburgh—equal.

LECTURES ON ANATOMY.

SENIOR STUDENTS.

FIRST-CLASS HONOURS.—1. R. F. M'Nair Scott, B.A., Singapore (*Medallist*); 2. Charles Chilton, D.Sc., New Zealand.

SECOND-CLASS HONOURS.—S. C. Pritchard, London.

JUNIOR PRACTICAL ANATOMY.

FIRST-CLASS HONOURS.—J. D. Comrie, M.A., Edinburgh; James Miller, Edinburgh; Arthur Preston, Yorkshire; W. J. Stuart, M.A., Edinburgh; C. H. J. Watson, South Africa; and L. M. Wedderburn, Forfar (*Medallists*)—equal; 7. W. J. Barclay, New Zealand; Y. A. Djedjizian, Asia Minor; John Pender, Dumfries-shire; Sutherland Simpson, B.Sc., Orkney; and R. G. Thompson, Buckhaven—equal; 12. J. A. Balck, Rostock; Yoshinobu Fukuda, Japan; J. G. Jack, Edinburgh; and J. Wishart Kerr, Scotland—equal; 16. Herbert Harris, Lincolnshire; John Jeffrey, Jedburgh; J. G. Munro, Thurso; William Park, Orkney; and R. B. Turnbull, Ross-shire—equal; 21. H. W. Boreham, Torquay; H. G. Carlisle, Liverpool; Charles Chilton, D.Sc., New Zealand; W. Girdwood, Cape Colony; G. D. Laing, Northumberland; L. W. Macpherson, Edinburgh; and E. M. Young, Kinross—equal; 28. H. M. Mackenzie, Scotland; and A. M. Wood, Leith—equal; 30. Thomas Livingstone, Durham; and T. S. Shepherd, Wigan—equal; 32. Richard Imrie, Castle Douglas; Langworthy Laurie, Worcester; and T. C. Mackenzie, China—equal; 35. R. R. Fasson, Edinburgh; David Fenton, Forfar; and J. F. Martin, Limerick—equal; 38. Harvey Baird, Perth; A. C. Heath, Surrey; William Reid, M.A., Montrose; and H. D. Wilson, Australia—equal; 42. John Craig, Edinburgh; J. L. Green, Edinburgh; R. M. Rowe, M.A., Edinburgh; and Angus Whyte, Easdale—equal; 46. Malcolm Campbell, M.A., Edinburgh; 47. George Mackie, Montrose; 48. J. R. Munro, Lincolnshire; A. C. N. M'Hattie, Antigua; William Paterson, Peebles; and C. E. Smith, New Zealand—equal; 52. T. S. A. Orr, Wigtonshire; and Peters-wald Pattison, Edinburgh—equal; 54. W. J. Collinson, Guernsey.

SECOND-CLASS HONOURS.—55. J. L. Louis, Mauritius; 56. D. J. Ferguson, Richmond-on-Thames; 57. A. M. Malcolmson, Leith.

LECTURES ON ANATOMY.

JUNIOR STUDENTS.

First-Class Honours.—1. Sutherland Simpson, B.Sc., Orkney; 2. James Miller, Edinburgh; 3. W. J. Barclay, New Zealand; 4. H. J. M'Lean, Timaru, New Zealand—(*Medallists*); 5. H. J. Hoile, Dundee; 6. Launcelot Bruce, Brechin; William E. Frost, Ireland; B. E. Myers, New Zealand; and Frank Young, M.A., Kirkcaldy—equal; 10. M. A. Swan, Paisley; 11. S. A. Ballantyne, Pettinain; 12. William Wallace, Berwick-on-Tweed; 13. G. S. Carmichael, Edinburgh; and Richard Imrie, Castle-Douglas—equal; T. H. W. Alexander, Perth; J. M. A. Macmillan, Scotland; Norman Patterson, Ancrum; and Garnett Wright, Whitehaven—equal; 19. G. A. Davidson, Wigtonshire; Langworthy Laurie, Worcester; A. A. Martin, New Zealand; and A. C. N. M'Hattie, Antigua—equal; 23. A. J. Baird, M.A., Port-Glasgow; Edward Ewart, Moffat; Herbert Harris, Lincolnshire; Davis Heron, Ballynahinch; Alexander Trotter, Perth; and Angus Whyte Easdale—equal; 29. D. C. L. Fitzwilliams, Wales; Charles Fraser, M.A., Scotland; F. D. Simpson, Bathgate; and G. R. Turner, London—equal.

Second-Class Honours.—33. Malcolm Campbell, M.A., Edinburgh; John Craig, Edinburgh; J. C. Gilchrist, Dumfries; and A. H. Griffith, Worcester—equal; 37. J. G. M'Dougall, Montrose; and L. C. Peel Ritchie, Edinburgh—equal; 39. Gavin Grey, Edinburgh; and P. W. Hampton, Ramsey—equal; 41. Lesley N. Biggs, India; J. B. Milne, Montrose; and Dundas Macknight, Whitburn—equal; 44. A. B. Black, India; John Jeffrey, Jedburgh; and J. K. A. Robertson, Greenock—equal; 47. B. K. Goldsmith, Douglas, Isle of Man; H. A. D. Moore, Singapore; and R. A. Ross, Cape Colony—equal; 50. Alexander Frew, Ayrshire; E. H. Gibbon, Trinidad; Robert Hamilton, Bradford; and S. H. Morris, Market Harborough—equal; 54. C. B. Balfour Paul, Edinburgh; K. L. Teng, Straits Settlements; and G. D. Whyte, London—equal; 57. A. W. Wilson, England; 58. Frederick Hardie, Kirkcaldy; Dunbar Hughes, Grenada; J. G. Mackenna, Dumfries; G. C. M'Leavy, Ireland; and H. M. Speirs, Haltwhistle—equal; 63. J. Dalgleish Anderson, Moffat; S. R. Sibbald, Lockerbie; A. D. Spence, Montrose; and T. J. G. Wilson, Tasmania—equal; 67. J. W. Falconer, Edinburgh; 68. J. H. Bell, Dumfriesshire; C. E. Southon, India; and J. H. Thornley, Workington—equal; 71. H. E. Arbuckle, Natal; J. M. L. Brown, Airdrie; Morden Carthew, South America; C. S. Clark, Brighton; James Munro, Dornoch; and James Shields, East Lothian—equal; 77. William Hutchison, Edinburgh; E. W. Martin, Sheffield; J. H. M'Kee, Belfast; A. W. Nankervis, Australia; and H. T. Wolfenden, Lancaster—equal; 82. W. P.

Cormack, Tain; C. E. P. Husband, Jamaica; A. J. Mackenzie, Inverness; H. C. Nixon, Leek; and John Thornhill, Cork—equal; 87. F. G. Belcombe, Edinburgh; J. P. Campbell, Aberdeenshire; Johannes S. Euslin, Cape Colony; J. F. Martin, Limerick; F. N. Menzies, Carnarvon; D. M. Macleod, Strontian; W. S. Scott, Selkirk; and Philip Weatherbe, Nova Scotia—equal; 95. P. J. Bodington, Norfolk; R. G. Leach, Rochdale; G. H. Lewis, South Wales; H. D. Shepherd, Wigan; and William Sloss, Australia—equal; 100. Hubert Bishop, Trinidad; William Eadie, Cumberland; C. E. Pepper, Weymouth; J. B. Primmer, Dunfermline; and Samuel Rattray, Edinburgh—equal; 105. Archibald Dods, Dalkeith; Andrew Fleming, Scotland; F. K. Kerr, Leith; B. A. Spence, Burntisland; John Sullivan, Edinburgh; and C. S. Vartan, Nazareth—equal; 111. G. F. Buist, St Andrews; W. C. Ross, Ayr; and J. F. Selkirk, Aberdeen—equal; 114. F. F. C. Jagger, Shrewsbury; and H. B. Sproat, Tobermory—equal.

The following gentleman was unavoidably absent from one of the examinations:—Robert Affleck, Scotland.

The SENIOR "JOHN AITKEN CARLYLE" BURSARY in *Anatomy and Physiology* was awarded to Mr Charles Chilton, D.Sc., New Zealand.

The JUNIOR "JOHN AITKEN CARLYLE" BURSARY in *Anatomy* and *Chemistry* was awarded to Mr S. A. Ballantyne, Pettinain; *prox. access.*—Alexander Trotter, Perth.

MACKENZIE BURSARIES FOR PROFICIENCY IN DISSECTING were awarded to J. A. Balck, Rostock; and L. M. Wedderburn, Forfar—equal; Yoshinobu Fukuda, Japan; and T. C. Mackenzie, China—equal; *prox. access.*—John Craig, Edinburgh; and Langworthy Laurie, Worcester.

A Special Certificate of Proficiency in Dissecting was awarded to A. C. Murray, Perthshire.

The following gentlemen acted as Prosectors to the Class:—
Miles Johnston, Uruguay.
R. F. M'Nair Scott, B.A., Singapore.
F. A. Barnardo, M.A., B.Sc., India.
F. J. Gray, Scotland.
J. T. P. Heatley, Northumberland.
Henry Wade, Falkirk.

W. TURNER, Kt., M.B., *Professor.*

PHYSIOLOGY.

SENIOR DIVISION.

FIRST-CLASS HONOURS.—1. J. H. Rhodes, Kendal; 2. G. Lyon, Argyllshire (*Medallists*); 3. A. C. Sandstein, New Zealand; 4. W. N. Barker, Fife; 5. D. B. Waters, Wick; 6. R. F. M'Nair Scott, B.A., Singapore; 7. A. C. M'Gilchrist, M.A.,

Islay; 8. R. J. Dick, Dunbar; and T. R. Matthews, Jamaica—equal; 10. A. Dingwall Fordyce, Edinburgh.

SECOND-CLASS HONOURS.—11. G. E. J. King, Cheltenham; 12. Clarence King, British Guiana; and D. V. M'Intyre, Dundee—equal; 14. R. W. T. Ewart, Moffat; 15. R. Cumming, Montrose; 16. D. Forbes, Perth; 17. George Dick, Wick; W. P. Meldrum, Mauritius; and P. L. M'All, Leeds—equal; 20. H. E. Gibbs, New Zealand; J. C. M'Connaghey, India; Ward Smith, Liverpool; and E. Somerville, Staffordshire—equal; 24. C. A. B. Horsford, West Indies; and E. W. Lewis, South India—equal; 26. H. T. Holland, Cornhill-on-Tweed; and R. Ritchie, Edinburgh—equal; 28. J. W. Mackenzie, Inverness; and H. Wade, Falkirk—equal; 30. E. H. Brunt, Staffordshire; and E. Laval, Edinburgh—equal; 32. B. S. Hyslop, Leven; 33. J. M. Bowie, Edinburgh; R. Crawford, Bradford; and R. Gibson, Wigtownshire—equal; 36. J. M. Cuthbert, Greenock; A. M'W. Green, Skye; J. Spencer Low, Yorkshire; A. M. M'Intosh, Edinburgh; and W. C. Wilson, Calcutta—equal; 41. Robert King, Edinburgh; and J. M. Reid, Edinburgh—equal; 43. E. F. Cyriax, London; and A. Gilmour, Edinburgh—equal; 45. A. Goodall, Ayrshire; 46. F. A. Barnardo, India; F. Dommissé, Cape Colony; and T. B. Shoolbread, Portsmouth—equal; 49. W. Bell, Barrow-in-Furness; W. Lockerbie, Edinburgh; E. M'Culloch, Edinburgh; P. H. M'Donald, Leith; and W. E. J. Wallis, Hampshire—equal; 54. W. J. Jones, Wrexham; R. A. M'Neill, Glasgow; J. T. Titterton, Staffordshire; A. K. Traill, India; and R. C. Verley, Jamaica—equal; 59. D. V. M. Adams, Lanark; S. Branch, St Kitts; C. S. Brebner, Darlington; R. M. Dalziel, Nagpur; F. J. Gray, Scotland; and H. M'Calman, Tarbert—equal; 65. J. R. Anderson, Orkney; J. Alcindor, Trinidad; A. G. Hamilton, Chester; P. H. Henderson, Coupar-Angus; T. E. Hincks, South Wales; A. H. James, Wales; J. Mackenzie, Inverness; J. Monroe, Edinburgh; G. A. Rorie, Dundee; J. A. Raeburn, Dollar; J. A. C. Smith, St Nicholas; G. E. Twigge-Molecey, England; and D. Wardrop, Greenock—equal.

JUNIOR DIVISION.

FIRST-CLASS HONOURS.—1. J. J. Galbraith, Inverness; 2. Y. A. Djedjizian, Asia Minor; 3. H. G. Carlisle, Liverpool; 4. C. Chilton, M.A., B.Sc., New Zealand; and C. H. J. Watson, South Africa—equal (*Medallists*); 6. J. Lückhoff, Cape Colony; 7. G. G. Hay, Abernethy; 8. T. B. Gornall, Preston; and J. Pender, Dumfriesshire—equal; 10. James Miller, Edinburgh; 11. J. Masson, Edinburgh; 12. T. Livingstone, Durham; 13. W. J. D. Bromley, Lancaster; W. M. Paul, M.A., Dollar; and A. Preston, Yorkshire—equal; 16. W. J. Barclay, New Zealand; M. M'Kelvie, Campbeltown; and A. S. M. Peebles, Coatbridge—equal; 19. M.

Carthew, South America; G. D. Laing, Northumberland; W. Mackay, New Zealand; and T. S. Shepherd, Wigan—equal; 23. H. M. Mackenzie, Helensburgh.

SECOND-CLASS HONOURS.—24. J. G. Jack, Edinburgh; 25. J. D. Comrie, M.A., Edinburgh; and B. K. Goldsmith, Douglas—equal; 27. G. H. J. Brown, India, and R. M. Rowe, M.A., Edinburgh—equal; 29. D. A. Callender, Edinburgh; G. A. Davidson, Stranraer; H. C. Kenn, Singapore; R. N. Pringle, Cape Colony; and W. J. Stuart, Edinburgh—equal; 34. B. E. Myers, New Zealand; and A. W. Nankervis, Melbourne—equal; 36. H. Baird, Perth; and W. Park, Orkney—equal; 38. J. Fullarton, Glasgow; E. J. Peill, Madagascar; and W. Reid, M.A., Montrose—equal; 41. S. C. Pritchard, London; 42. R. M. Brebner, Canada; J. G. Mitchell, Sutherlandshire; J. G. Munro, Thurso; and E. M'K. Young, Kinross—equal; 46. W. M. Mackay, Durham; and J. C. Carr, Carlisle—equal; 48. J. Jeffrey, Jedburgh; D. B. King, Fife; and J. F. Martin, Limerick—equal; 51. E. A. Brown, Cape Colony; and W. Darling, Edinburgh—equal; 53. J. Haddow, Scotland; and P. W. Hampton, Isle of Man—equal; 55. R. F. Jardin, British Guiana; J. L. Louis, Mauritius; G. Mackie, Montrose; and R. B. Turnbull, Ross-shire—equal; 59. J. Anderson, Dollar; T. S. A. Orr, Wigtonshire; and L. M. Wedderburn, Forfar—equal; 62. P. P. Gauteaume, Trinidad; 63. G. C. M'Leavy, Ireland; 64. A. Dods, Dalkeith; A. M. Holmes, England; and J. A. R. Thompson, Edinburgh—equal; 67. A. K. Smith-Shand, Aberdeen; J. W. Kerr, Scotland; and J. R. Munro, Norwich—equal; 70. A. C. Heath, Egham; L. W. M'Pherson, Melrose; E. T. Melhuish, London; G. H. Menzies, Scotland; A. Mouat, Haddington; H. B. Sproat, Tobermory; and R. G. Thomson, Buckhaven—equal.

PRACTICAL PHYSIOLOGY.

FIRST-CLASS HONOURS.—1. F. J. Gray, Scotland (*Medallist*); 2. T. R. Matthews, Jamaica; 3. J. T. P. Heatley, Northumberland; 4. E. Somerville, Leek; 5. J. Miller, Edinburgh.

SECOND-CLASS HONOURS.—6. L. D. Parsons, B.A., Madras; 7. E. A. Boxer, Lewisham; 8. H. Harris, Lincolnshire; 9. E. G. Ffrench, Jamaica.

WILLIAM RUTHERFORD, M.D., *Professor.*

MATERIA MEDICA.

FIRST-CLASS HONOURS.—1. George Lyon, Argyllshire; 2. Alfred C. Sandstein, New Zealand; 3. Clarence King, British Guiana; 4. James Allison, Carstairs; 5. R. F. M'Nair-Scott, B.A., Singapore (*Medallists*); 6. Archibald C. M'Gilchrist, M.A., Islay; 7. Robert Cumming, Montrose; 8. David V. M'Intyre, Dundee; 9. Henry Hugh Roberts, Llanelly, South Wales; 10. Alfred T. Gailleton, Perth.

Second-Class Honours.—11. George E. J. King, Cheltenham; 12. Stanley Branch, West Indies; and John Cameron, Laurencekirk—equal; 14. William Bell, Barrow-in-Furness; A. Dingwall Fordyce, Edinburgh; Gerrit de Labat, Cape Colony; William E. M'Kechnie, South Africa; and D. R. Waters, M.A., Wick—equal; 19. James R. Anderson, Orkney; Thomas D. M'Laren, Edinburgh; and William Carlyle Wilson, Calcutta—equal; 22. Alexander Goodall, Ayrshire; W. M. Paul, M.A., Dollar; and James Martin Reid, Edinburgh—equal; 25. Robert Gibson, Port William; and Henry T. Holland, Cornhill-on-Tweed—equal; 27. Ernest F. Bashford, Bowden, Cheshire; Robert J. Dick, Dunbar; and Ernest W. Lewis, Bellary, S. India—equal; 30. A. M'Watt Green, Isle of Skye; Graeme Hamilton, Ashton-under-Lyne; and Wroughton G. Heath, Antigua—equal; 33. D. Elliott Dickson, Blairgowrie; C. A. B. Horsford, W. Indies; and John Wm. Mackenzie, Inverness—equal; 36. William Lockerbie, Edinburgh; 37. John M. Bowie, Edinburgh; Duncan Forbes, Perth; and John M'Gregor, Crieff—equal; 40. Wm. Craig, Kelso; and Donald A. M'Vean, Edinburgh—equal; 42. Balfour S. Hyslop, Leven; Robert King, Edinburgh; Evariste Laval, Edinburgh; and James W. M'Intosh, Scotland—equal; 46. C. S. Brebner, Darlington; James Burnet, Edinburgh; George Dick, Wick; Robert W. T. Ewart, Dumfriesshire; John A. C. Smith, St Nicholas; George E. Twigge-Molecey, England; and David Wardrop, Greenock—equal; 53. Robert Bruce, Edinburgh; Fred. A. Dommissé, Cape Colony; and Edward M'Culloch, Edinburgh—equal; 56. Charles Forsyth, Glasgow; Thomas P. Greenwood, Yorkshire; Albert A. Gunn, Strathpeffer; Robert W. M'Kenna, Dumfries; George B. Pemberton, Dublin; and Ward Smith, Liverpool—equal; 62. James A. Raeburn, Dollar; and George A. Rorie, Dundee—equal; 64. Harry E. Gibbs, New Zealand; James Leggate, Holytown; W. P. Meldrum, Mauritius; Robert Pugh, Wales; and Edgar Somerville, Leek—equal; 69. J. Spencer Low, Yorkshire; and Alfred Shearer, Orkney—equal; 71. Francis W. Broadbent, Leicester; Ernest Geo. Ford, Yorkshire; Andrew Gilmour, Edinburgh; Thomas E. Hincks, S. Wales; Arthur W. Limont, England; W. C. Macdonald, New Zealand; Alexander G. Pirie, Dundee; Henry G. P. Raeburn, Leith; and Charles F. T. Scott, Ireland—equal; 80. Edgar H. Brunt, Staffordshire; J. M. Cuthbert, Greenock; Robert Gelfatly, Manchester; William James Jones, Wrexham; James W. Mathewson, Dunfermline; Charles M. Pearson, Edinburgh; David Robertson, Rothesay; and Arthur H. Thomas, Lanarkshire—equal; 88. Robert Cameron, Crieff; Leonard J. Montagu Deas, N.W.P. India; Harold Macfarlane, Kilmarnock; Edward C. G. Maddock, Toronto; and James Monroe, Edinburgh—equal; 93. J. C. M'Conaghey, India;

William M'Kay, New Zealand; William Macniven, Scotland; William T. Shannon, Liverpool; and William Tarr, Somerset—equal.

THOMAS R. FRASER, M.D., *Professor.*

GENERAL PATHOLOGY.

SENIOR DIVISION.

FIRST-CLASS HONOURS.—1. C. M. Cooper, Somersetshire (*Medallist*).

SECOND-CLASS HONOURS.—George Holliday, England; Thomas M. Ness, Dundee.

JUNIOR DIVISION.

FIRST-CLASS HONOURS.—1. Thomas Biggam, Wigtownshire; and W. Hamilton, Middlesborough (*Medallists*)—equal; 3. George Gatenby, Stockton-on-Tees; 4. Patrick Kinmont, Scotland; 5. T. R. W. Armour, Edinburgh; and John Malcolm, Caithness—equal.

SECOND-CLASS HONOURS.—7. J. S. Fraser, Fifeshire; 8. J. D. Slight, Portobello; W. R. Somerset, Derbyshire; W. M. A. Smith, Forfarshire; and B. C. R. Aldren, Malvern—equal; 12. H. F. Boland, Dundee; 13. W. M. Wilson, Stockton-on-Tees; 14. W. G. Heath, Antigua; T. J. T. M'Hattie, Antigua; T. C. Lander, Ireland; F. W. More, Caithness; and R. G. Riddell, East Lothian—equal; 19. William Burns, Forfarshire; and L. W. Davies, Wales—equal; 21. D. E. Dickson, Blairgowrie; 22. G. B. Hollings, London; and W. M. Martin, Ireland—equal; 24. R. Hill, London; and G. L. Findlay, Natal—equal; 26. T. P. Greenwood, Yorkshire; Leonard Boyer, Lincolnshire; and B. K. Nariman, India—equal; 29. V. G. Alexander, Scotland; W. E. M'Kechnie, S. Africa; R. W. T. Ewart, Dumfriesshire; Arthur W. Limont, Northumberland; A. B. MacCarthy, Queenstown; and A. H. Pirie, Dundee—equal.

PRACTICAL PATHOLOGY.

FIRST-CLASS HONOURS.—T. C. Lander, Ireland.

SECOND-CLASS HONOURS.—W. H. Dickinson, Newcastle-on-Tyne; E. Laval, Edinburgh.

W. S. GREENFIELD, M.D., *Professor.*

SYSTEMATIC SURGERY.

SENIORS.

FIRST-CLASS HONOURS.—1. James Fisher Lindsay, Lanarkshire; and Alexander H. Edwards, Scotland (*Medallists*); 3. Percy T. Herring, New Zealand; 4. A. Corsar Sturrock, Linlithgow; 5. David R. Rowlands, North Wales; 6. Robert Gow, Ralston, Glasgow; 7. James Bannerman, Southport; and F. H. Merry,

Edinburgh—equal; 9. George B. Serle, East Linton; 10. John Stevenson, New Zealand; 11. R. K. Howden, Natal; John Macmillan, Edinburgh; and F. M. Purchas, New Zealand—equal.

SECOND-CLASS HONOURS.—14. Oswald Raitt, Nairn; 15. John A. Hunter, Belfast; Joseph Mason, Yorkshire; and J. D. S. Milln, Tayport — equal; 18. A. D. Macpherson; 19. D. M'Askie, Ireland; 20. William W. Wood, Leith; 21. J. Boyd Jamieson, Edinburgh; and William A. Skinner, Berwickshire—equal; 23. S. Mallanah; 24. W. G. C. Geekie, Perthshire; 25. Andrew G. Carment, Scotland; 26. Edward F. M. Neave, Dundee; 27. M. A. Ghany, Hyderabad; 28. J. F. Holden, Preston; 29. Alexander M. Rattray, Portobello; 30. A. G. Naylor, Gloucester.

JUNIORS.

FIRST-CLASS HONOURS.—1. John D. Comrie, M.A., Edinburgh; 2. Wm. James Stuart, M.A., Edinburgh; 3. C. H. J. Watson, Cape Colony; 4. Arthur Preston, Yorkshire (*Medallists*); 5. H. G. Carlisle, Liverpool; and L. M. Wedderburn, Forfar—equal; 7. W. J. Barclay, New Zealand; and Y. A. Djedjizian, Asia Minor—equal; 9. William Reid, Montrose, and R. B. Turnbull, Rossshire — equal; 11. Wm. Bennett, Ireland; and W. J. D. Bromley, Lancashire - equal; 13. W. A. Murray, Cape Colony; and Wm. Park, Kirkwall—equal; 15. D. A. Callender, Edinburgh; G. G. Hay, Abernethy; Thomas Livingstone, England; and George Mackie, Montrose—equal; 19. B. K. Goldsmith, Isle of Man; 20. Laurance D. Parsons, B.A., Madras; and R. M. Rowe, M.A., Edinburgh—equal.

SECOND-CLASS HONOURS.—22. John C. Carr, Carlisle; 23. J. B. Gornall, Preston; 24. J. J. Galbraith, Inverness; James Lückhoff, Cape Colony; H. M. Mackenzie, Scotland; and John G. Munro, Thurso—equal; 28. Robert U. Brebner, Canada; and Roderick R. Macnicol, Argyllshire—equal; 30. G. H. Menzies, Inverkeithing; T. P. Oates, Cape Colony; John Pender, Dumfriesshire; and A. H. Pirie, Dundee —equal; 34. G. Haddow, Scotland; Maxwell Mackelvie, Argyllshire; and A. K. Smith-Shand, Aberdeen—equal; 37. J. A. Balck, Germany; and Irvine K. Hermon, Montrose—equal; 39. D. J. Fergusson, Surrey; Cadivor Morgan, Wales; and R. Greig Thomson, Buckhaven—equal; 42. A. Hume Griffith, Bedford; Geo. C. M'Leavy, Ireland; T. S. Allan Orr, Wigtownshire; and Chas. S. Vartan, Palestine—equal; 46. John Fullarton, Glasgow; D. J. Hughes, N. Wales; John Jeffrey, Jedburgh; A. J. Mackenzie, Inverness; and James Masson, Scotland—equal; 51. E. Archer Brown, Cape Colony; and David Fenton, Forfar —equal; 53. W. J. Collinson, Guernsey; J. Ramsay Munro, Lincolnshire; C. Heron Watson, Edinburgh; and Ed. M'Killop Young, Kinross—equal; 57. E. A. Boxer, Lewisham; Morden Carthew, Langholm; A. Stanley Frank, Yorkshire; Wm. Paterson, Peebles; R. N.

Pringle, Cape Colony; and Chas. E. Smith, Norfolk—equal; 63. G. A. Davidson, Wigtownshire; J. G. Jack, Edinburgh; Wm. Purves, Skye; and W. R. E. Williams, Shropshire—equal; 67. J. B. Cassels, India; A. C. Heath, Surrey; T. C. Mackenzie, China; A. W. Nankervis, Melbourne, Australia; T. S. Shepherd, Wigan; and A. B. Slater, Yorkshire—equal; 73. L. D. H. Brough, Jamaica; 74. C. S. Clark, Brighton; P. A. Maclagan, Edinburgh; and L. W. Macpherson, Melrose—equal; 77. Leonard Crossley, Westmoreland; David B. Merry, Dundee; and K. L. Teng, Straits Settlements—equal; 80. Arthur M. Holmes, England; 81. G. J. Young, Yorkshire; 82. K. Chapel, Scotland; J. M. Macdonald, Scotland; and W. M. Mackay, Durham—equal; 85. William Darling, Edinburgh; Y. Fukuda, Japan; E. G. D. Menzies, Innerleithen; J. G. Mitchell, Sutherlandshire; and Alex. Mouat, Haddington—equal.

The following gentlemen were unavoidably absent from one examination:—

First-Class Honours.—A. S. M. Peebles, Coatbridge.

Second-Class Honours.—D. B. King, Fifeshire; E. A. Loch, Scotland.

PRACTICAL SURGERY.

SENIORS.

Honours.—1. James Fisher Lindsay (*Medallist*); 2. A. Corsar Sturrock; 3. James Bannerman; 4. Alexander H. Edwards; 5. John Stevenson; 6. F. H. Merry; 7. Percy T. Herring; 8. Robert G. Ralston; 9. William A. Skinner; 10. D. R. Rowlands; 11. R H. Howden; 12. M. A. Ghany; 13. W. G. O. Geekie; 14. F. M. Purchas; 15. Joseph Mason; 16. George B. Serle; 17. D. M'Askie; 18. John Macmillan; 19. J. D. S. Miller.

HAROLD J. STILES, M.B., *Demonstrator.*

JUNIORS.

Medallist.—L. M. Wedderburn.

Proxime Accessit.—J. D. Comrie.

Honours.—William Bennett, G. Mackie, William Park, W. J. Stuart, H. G. Carlisle, Bk. Goldsmith, J. B. Gornall, G. Haddow, W. A. Murray, A. S. M. Peebles, William Reid, R. B. Turnbull, W. J. D. Bromley, J. C. Carr, K. Chapel, C. S. Clark, G. G. Hay, D. J. Hughes, P. A. Maclagan, James Masson, C. Morgan, J. Ramsay Munro, R. M. Rowe, C. S. Vartan, Y. A. Djedjizian, Arthur Preston, L. D. Parsons, B.A.; A. K. Smith-Shand, A. B. Slater, T. Livingstone, J. L. Louis, H. M. Mackenzie, L. W. Macpherson, G. H. Menzies, William Paterson, R. G. Thomson, W. J. Barclay, C. S. Clark, D. J. Fergusson, J. J. Galbraith.

E. G. FORTUNE, M.B., *Demonstrator.*

JOHN CHIENE, M.D., *Professor.*

MIDWIFERY.

First-Class Honours.—1. W. F. Harvey, Scotland; 2. L. Grant, M.A., Scotland; 3. D. Brough, Scotland; and P. T. Herring, New Zealand—equal (*Medallists*); 5. G. Gatenby, England; and W. H. Goldie, New Zealand—equal; 7. H. S. Ballantyne, Scotland; T. M. Callender, Scotland; E. Matthew, Scotland; J. A. Milroy, Scotland; and H. M. Morton, England—equal; 12. A. J. W. Buchanan, Scotland; J. Eason, Scotland; and B. Livingstone Learmonth, Australia—equal; 15. R. W. Anthony, Scotland; J. D. M'Crindle, Scotland; W. M. Milne, Scotland; J. Muir, Scotland; and J. Richards, Wales—equal; 20. W. Hamilton, England; G. C. Low, M.A., Scotland; and F. H. Merry, Scotland—equal; 23. J. F. Lindsay, Scotland; 24. A. F. Cameron, Scotland; R. K. Howden, South Africa; J. Macmillan, Scotland; S. Mallanah, India; and J. Mason, England—equal: 29. W. J. A. Erskine, Scotland; W. H. Fowler, Scotland; D. Gold, Scotland; J. A. Hunter, Ireland; and N. Maudsley, England—equal; 34. C. H. Philips, West Indies; W. A. Skinner, Scotland; G. S. Small, Scotland; and J. Stevenson, New Zealand—equal; 38. W. G. Heath, West Indies; T. F. Johnston, Scotland; C. D. Lauder, India; R. L. Mackirdy, Scotland; J. Malcolm, Scotland; and W. W. Wood, Scotland—equal; 44. F. A. Hardy, England; P. Kinmont, Scotland; G. H. List, Scotland; T. V. Lockhart-Mure, Scotland; R. E. Loney, Scotland; and F. M. Purchas, New Zealand—equal; 50. J. E. Bennett, Ireland; L. Cairns, Scotland; A. G. Naylor, Scotland; and A. J. Orchard, New Zealand—equal.

Second-Class Honours.—54. W. Anderson, Australia; W. T. Hislop, Australia; W. Jagger, England; and A. L. Low, Scotland—equal; 58. E. Arkwright, England; G. W. Mackintosh, Scotland; F. W. More, Scotland; and G. B. Serle, Scotland—equal; 62. T. Johnstone, England; N. H. Ross, India; and T. H. Stevenson, Ireland—equal; 65. C. H. Kruger, South Africa; G. M'Kellar, Scotland; C. Porter, Scotland; and W. Mackenzie, Scotland; W. Mowat, Scotland; W. Martin, Ireland; and T. J. Wilson, England—equal; 69. W. Burns, Scotland; G. L. Chiene; T. M'Hattie, West Indies—equal; 74. J. G. Bailey, England; L. F. Biccard, South Africa; and R. S. Young, Ireland—equal; 77. W. S. Eaton, England; G. B. Hollings, England; R. W. Knox, Scotland; R. Y. Ponsonby, Madagascar, and G. Sanders, Scotland — equal; 82. A. G. Thomson, Scotland; 83. T. N. Johnston, Scotland; 84. M. A. Ghany, India; 85. A. B. MacCarthy, Ireland; 86. E. Baumann, South Africa; and A. J. Ryle, England—equal; 88. B. R. C. Christie, Scotland; 89. F. Porter, Scotland; 90. J. Nicoll, Scotland; and R. Selby, Scotland—equal; 92. H. Boland, Scotland; 93. T. Biggam, Scot-

land; 94. A. E. Williams, England; 95. Ian L. MacInnes, Scotland.

The following gentlemen were prevented through illness from being present at more than two examinations:—John Henderson, E. Porritt, D. M'Askie.

A. R. SIMPSON, M.D., *Professor.*

PRACTICE OF MEDICINE.

SENIORS.

First-Class Honours.—1. J. T. Hewetson, Cumberland; 2. Percy T. Herring, New Zealand (*Medallists*); 3. John Eason, Leith; 4. John A. Milroy, Wigtownshire; 5. Edwin Bramwell, England; and Gilbert A. Welsh, Scotland—equal; 7. James Bannerman, Southport; 8. A. Corsar Sturrock, M.A., Linlithgow; 9. John Ballantyne, Galloway; Stewart M'Donald, Galloway; and A. Y. Greenwood, India—equal; 12. Lewis Grant, M.A., Scotland; and John Macmillan, Edinburgh—equal; 14. O. St John Moses, Calcutta; and A. D. Yule, Arbroath—equal; 16. W. G. C. Geekie, Scotland; B. L. Livingston Learmonth, Australia; and D. R. Rowlands, Wales—equal; 19. D. H. Hutchinson, Bristol; and G. F. Whyte, Nairnshire—equal.

Second-Class Honours.—21. J. F. Lindsay, Scotland; and W. H. Robb, Glencaple—equal; 23. A. W. Fletcher, B.Sc., Melbourne; 24. D. W. Gold, Scotland; R. L. M'Kirdy, Rothesay; Joseph Mason, England; and J. W. Simpson, Polmont—equal; 28. M. L. Dhingra, India; and John A. Hunter, Belfast—equal; 30. R. M. Hall, England; and F. M. Purchas, New Zealand—equal; 32. C. C. Forrester, Scotland; C. F. Giddy, York; B. K. Nariman, India; and D. G. M. Teague, Australia—equal; 36. W. H. Hill, Scotland; and James Lee, Ireland—equal; 38. Walter Jagger, England; T. V. Lockhart-Mure, Kirkcudbright; and J. R. Richards—equal; 41. A. G. Carment, India; 42. B. M. Bone, Lancaster; and S. Mallanah, India—equal; 44. W. A. Skinner, Lauder; and A. E. Williams, Chester—equal; 46. B. R. Craig Christie, Scotland.

Unavoidably absent from one Examination.—First-Class Honours.—1. C. B. Crampton, England; and Percy J. Henderson, Edinburgh—equal; 3. J. L. Marjoribanks, East Lothian.

Second-Class Honours.—4. George King, Pittenweem.

JUNIORS.

First-Class Honours.—1. A. H. Watt, Edinburgh; 2. John Muir, Kirkcudbrightshire; 3. James Graham, Joppa; 4. Edwin Matthew, Aberdeen (*Medallists*); 5. R. W. Anthony, India; and Cyril H. Phillips, Barbadoes—equal; 7. Patrick Kinmont, Scotland; and A. J. Orchard, New Zealand—equal; 9. J. S. Fraser, Cupar-Fife; and James Prentice, M.A., Scotland—equal; 11. George C.

Low, M.A., Forfarshire; 12. T. M. Callender, Leith; R. K. Howden, Natal; Charles D. Lauder, Bangalore; and H. I. J. Thacker, B.A.—equal; 16. F. H. Merry, Edinburgh; and W. M. Milne, Morayshire—equal; 18. John Malcolm, Caithness; and Noel Maudsley, Appleby—equal.

SECOND-CLASS HONOURS.—20. J. D. S. Miller, Tayport; and Oswald Raitt, Nairn—equal; 22. W. J. H. Hislop, New Zealand; Henry Y. Taylor, Edinburgh; and Frank M. Willcox, South Australia—equal; 25. John Richards, North Wales; and George Serle, East Linton—equal; 27. R. W. Knox, Allahabad; 28. J. E. H. Bennett, Ireland; and John Stevenson, New Zealand—equal; 30. J. G. Bailey, England; G. H. List, Scotland; Edward F. M. Neave, Scotland; and W. W. Wood, Leith—equal; 34. R. G. Riddell, East Lothian; 35. B. C. R. Aldren, Malvern; and A. F. Cameron, Forfarshire—equal; 37. E. E. Porritt, New Zealand; 38. George S. Small, Brechin; and W. A. Young, Scotland—equal; 40. William Hamilton, Yorkshire; Charles H. Kruger, South Africa; G. W. Miller, Scotland; and F. W. More, Caithness—equal; 44. James W. M'Intosh, Scotland; A. J. Ryle, Wales; and G. A. S. Sander, Paris—equal; 47. William Burns, M.A., Forfarshire; and Thomas F. Johnston, Ormiston—equal; 49. W. H. Brendon, Cornwall; 50. C. E. Trimble, England; 51. Victor G. Alexander, Scotland; L. F. Biccard, Cape Colony; and Thomas Biggam, Scotland—equal; 54. H. F. Boland, Dundee; George A. Vincent, Trinidad; and R. S. Young—equal; 57. Leonard Boyer, Lincolnshire; James Donaldson, Carnwath; William Martin, Ireland; and David M'Askie, County Tyrone—equal; 61. W. M. Wilson, Northumberland; 62. Marcus Mackenzie, Ireland; and Fred. Porter, Jedburgh—equal; 64. Rowland Hill, London; 65. G. B. Hollings, London; and W. R. Somerset, Derbyshire—equal.

T. GRAINGER STEWART, Kt., M.D., *Professor.*

SPECIAL COURSE IN PUBLIC HEALTH.

FIRST-CLASS HONOURS.—1. John Malcolm; 2. J. D. Slight; and 3. William H. Hill (*Medallists*); 4. A. Gibson, and Percy T. Herring—equal; 6. William Hamilton and F. M. Willcox—equal; 8. C. M. Cooper; 9. William Burns, M.A.; William H. Carse; F. W. More; and W. H. Robb—equal; 13. R. K. Howden; 14. Thomas Biggam; 15. G. Scott Brown and A. L. de Jager—equal; 17. P. Kinmont and A. J. W. Buchanan—equal; 19. E. P. Baumann; Stuart M'Donald; James Nicoll; and Robert G. Riddell—equal.

SECOND-CLASS HONOURS.—25. W. J. H. Hislop; D. R. Rowlands; W. R. Somerset; and James Fisher Lindsay—equal; 27. William H. Goldie; 28. J. Stoddart; 29. R. W. Anthony; James Donaldson, James Forrest; John R. Lord; A. B. M'Carthy; George A. Vincent; R. H. Walter; and F. M. Purchas—equal; 37. Daniel

Brough and R. C. Cunningham—equal; 39. William Martin; G. W. Miller and Chas. M. Robertson—equal; 42. A. J. Orchard and J. F. Wolfe—equal; 44. George S. Small and "Motto"—equal; 46. H. Belasco and D. Clow—equal; 48. A. G. Brooke and Thomas F. Johnston—equal; 50. J. M'Hattie and S. Mallanah—equal; 52. H. F. Boland; C. D. Lauder; and R. Owen—equal; 55. G. Liddell; 56. E. F. Wills; 57. W. M. A. Smith and H. Y. Taylor—equal; 59. J. D. S. Milln; 60. Herbert F. L. Taylor and A. E. Williams—equal; 62. William Anderson and C. H. Kruger—equal; 64. C. H. Phillips; 65. C. A. Brugman; T. N. Johnston; and Thomas B. M. Shoolbread—equal.

DOUGLAS MACLAGAN, Kt., M.D., *Professor.*

Graduation in Medicine and Surgery.

A—REGULATIONS APPLICABLE TO ALL WHO BEGIN MEDICAL STUDIES AFTER 1ST OCTOBER 1892.

For those who began Medical Studies before 1st October 1892, *see Regulations B, page* 626.

I. Four Degrees in Medicine and Surgery are conferred by the University of Edinburgh, viz., Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The Degree of Ch.B. is not conferred on any person who does not at the same time obtain the Degree of M.B., and the Degree of M.B. is not conferred on any person who does not at the same time obtain the Degree of Ch.B.

[These Degrees admit to the Medical Register. They qualify for Practice throughout Her Majesty's dominions, and for admission to the Military, Naval, and other Public Medical Services in the United Kingdom.]

II. Subject to Regulations to be made from time to time by the University Court, the University may also confer Diplomas in Special Branches of Medical and Surgical Practice on Graduates of the University in Medicine and Surgery.

PRELIMINARY EXAMINATION.[1]

III. Before commencing medical studies, each student must pass a Preliminary Examination in (1) English, (2) Latin, (3) Elementary Mathematics, and (4) Greek or French or German: Provided always that, in the case of a candidate whose native language is not English,

[1] See also pages 609-613.

an examination in the native language of the candidate may be substituted for one in either French or German, and an examination in any other classical language for one in Latin or Greek.

IV. The extent and standard of the Preliminary Examination is determined by the Joint Board of Examiners constituted under Ordinance, General, No. 8 [Regulations as to Examinations], in accordance with the terms of that Ordinance.

V. The Preliminary Examination is conducted in accordance with the provisions of Ordinance, General, No. 8 [Regulations as to Examinations];—and, subject to the provisions of the immediately succeeding section hereof, the entire examination must be passed at one and the same time, except in the case of students who, prior to the date at which these Regulations came into operation, had passed a portion of the Preliminary Examination of the University, or of a Preliminary Examination recognised by the University.

VI. A Degree in Arts, or in Science (not being a Degree *honoris causa tantum*), in any of the Universities of the United Kingdom, or in any Colonial or Foreign University specially recognised for the purpose by the University Court, exempts from the Preliminary Examination; and the Joint Board of Examiners appointed under the provisions of Ordinance, General, No. 8 [Regulations as to Examinations], has power to determine what examinations, other than those for the degrees hereinbefore mentioned, shall be accepted either in whole or in part in place of the Preliminary Examination.

PROFESSIONAL EDUCATION.[1]

VII. Candidates are admitted to the Degrees of M.B. and Ch.B. only after they have fulfilled the following conditions:—

1. The Candidate must have been engaged in Medical study for at least five years.
2. In each of the first four years the Candidate must have attended at least two courses of instruction, in one or more of the subjects of study specified in sub-section 4 hereof—each Course extending over a session of not less than five months, either continuous or divided into two terms; or, alternatively, one such Course, along with two Courses, each extending over a session of not less than two and a half months.
3. During the fifth or final year the Candidate must be engaged in Clinical study for at least nine months at the Royal Infirmary, Edinburgh, or at one or more of such Public Hospitals or Dis-

[1] No Course of Lectures will be allowed to qualify unless the Lecturer certifies that it has embraced at least 100 Lectures, or 50 Lectures, in conformity with the requirements of this section. Three Months Courses on Materia Medica, Pathology, and Midwifery do not qualify. Apprenticeship, Dispensary or Hospital Practice, Practical Midwifery, and Vaccination, &c., are not reckoned as *Classes* in making up an *Annus Medicus*.

pensaries, British or Foreign, as may be recognised for the purpose by the University Court.

4. The Candidate must, during his Curriculum, have attended a Course or Courses of instruction in each of the following subjects of study, including such Examinations as may be prescribed in the various Classes, viz. :—

1. Anatomy, ...	During a Course of not less than Five Months.
2. Practical Anatomy, ...	During two Courses of not less than Five Months each.[1]
3. Chemistry, ...	During Courses of not less than Five Months.
4. Materia Medica and Therapeutics, .	
5. Physiology or Institutes of Medicine,	
6. Practice of Medicine, ...	
7. Surgery, ...	
8. Midwifery, and the Diseases peculiar to Women and Infants. Two Courses of Midwifery, of Three Months each, provided different departments of Obstetric Medicine be taught in each of the Courses, are reckoned equivalent to a Course of not less than Five Months, ...	
9. Pathology, ...	
10. Practical Chemistry, ...	During Courses of not less than Two and a half Months.
11. Physics (including the Dynamics of Solids, Liquids, and Gases, and the Rudiments of Sound, Heat, Light, and Electricity), ...	
12. Elementary Botany, ...	
13. Elementary Zoology, ...	
14. Practical Physiology, ...	
15. Practical Pathology, ...	
16. Medical Jurisprudence and Public Health, ...	

Provided always in so far as regards the University of Edinburgh that—

(*a*) It is the duty of the Senatus to determine from time to time the number of meetings of which such Courses shall consist, and in what cases two half Courses shall be

[1] Certificates of attendance on Practical Anatomy must express not only the number of months engaged in dissection, but the names of the parts dissected, and the degree of care with which the dissections have been made. Students are recommended not to appear for Examination in Anatomy, with a view to a Degree, until they have dissected the human body at least once.

deemed equivalent to a full Course; and to report the determination to the University Court for its approval.

(*b*) It is the duty of the Professors and Lecturers to submit to the Senatus annually at the end of the Winter Session a scheme specifying what proportion of the Courses shall be devoted to Lectures, Practical Demonstrations, Examinations, and Tutorial Work respectively. The Senatus must transmit such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(*c*) The University Court will not grant or continue recognition to any institutions or teachers unless it is satisfied that their Courses of Instruction are equivalent to the Courses sanctioned in the Universities of Scotland.

5. The Candidate must have attended for at least three years the Medical and Surgical Practice either of the Royal Infirmary, Edinburgh, or of a General Hospital elsewhere, which accommodates not fewer than eighty patients, and possesses a distinct staff of Physicians and Surgeons.
6. The Candidate must have attended Clinical Surgery during a Course or Courses extending over not less than nine months. These Courses may be conducted by the Professor of Clinical Surgery, or by Professors or Lecturers appointed for the purpose by the University Court, or by the Ordinary Surgeons of the Royal Infirmary, Edinburgh, or of a General Hospital defined and recognised as hereinbefore provided, and must consist of regular instruction at the bedside, along with Clinical Lectures.
7. The Candidate must have attended Clinical Medicine during a Course or Courses extending over not less than nine months. These Courses may be conducted by Professors of the University, or by Lecturers appointed for the purpose by the University Court, or by the Ordinary Physicians of the Royal Infirmary, Edinburgh, or of a General Hospital defined and recognised as hereinbefore provided, and must consist of regular instruction at the bedside, along with Clinical Lectures.
8. The Candidate must have attended a course of instruction in Mental Diseases given by the University Lecturer, or by a recognised Teacher, consisting of at least six Class-room meetings for lectures and demonstrations and twelve meetings in the Wards of a recognised Asylum for the Insane.
9. The Candidate must have attended a Course of twenty-five meetings on Practical Pharmacy in a University or recognised School of Medicine, or have dispensed drugs for a period of three months in an Hospital or Dispensary, or the establishment of any chemist and druggist or pharmaceutical chemist of Great Britain, or any pharmaceutical chemist of Ireland, who is registered in the Books of the Pharmaceutical Society of Great Britain or of the Pharmaceutical Society of Ireland respectively.

10. The Candidate must have attended, for at least six months, by apprenticeship or otherwise, the out-practice of an Hospital, or the practice of a Dispensary, or of a Physician or Surgeon, or of a Member of the London or Dublin Society of Apothecaries. He must have acted as Clerk in the Medical and Dresser in the Surgical Wards of a Public Hospital; and he is further required to attend :—*A.* (1) Post-Mortem Examinations in a recognised Hospital for a period of at least three months, during which practical instruction is given in the methods of making Post-Mortem Examinations, and in framing Reports. (2) A course of Clinical instruction in Fevers, given by a University Lecturer, or by a recognised Teacher, consisting of at least twelve meetings in a recognised Hospital for Infectious Diseases, during which meetings Clinical instruction is given on cases of Infectious Disease. (3) Instruction in Diseases of the Eye, given by the University Lecturer, or by a recognised Teacher, consisting of at least twelve Class-room meetings and twelve meetings for Clinical instruction in the Wards of a recognised Hospital, or in the Wards of a Hospital, and in a Dispensary, both recognised for the purpose. The Course to include sufficient practical instruction in the methods of Examining the Eye. (4) A Course of Operative Surgery, conducted by the Professor of Surgery in the University, or a similar course conducted by a recognised Teacher. *B.* The Candidate is also required to attend any one of the two following courses : — (1) Clinical instruction in Children's Diseases, given by the University Lecturers on this subject, or by a recognised Teacher or Teachers in a Hospital recognised for the purpose, to such an extent as may be required by the Senatus, with the approval of the University Court. (2) Instruction in diseases of the Larynx, Ear, and Nose, given by a University Lecturer, or by a recognised Teacher, consisting of at least six Class-room meetings, and twelve meetings for Clinical instruction in the Wards of a recognised Hospital, or in the Wards of a Hospital and in a Dispensary, both recognised for the purpose.

11. The Candidate must have attended, under the superintendence of a registered Medical Practitioner, twelve cases of labour, or such additional number as the Senatus, with the sanction of the University Court, may from time to time determine; or have attended for three months the practice of a Lying-in Hospital, or of the Maternity Department of a General Hospital or other Public Charitable Institution, and have conducted personally six, or such an additional number of cases of labour as the Senatus, with the approval of the University Court, may from time to time determine.

12. The Candidate must have been properly instructed in Vaccination at a Public Vaccination Station, by a Public Vaccinator,

authorised by the proper Government Authority to grant Certificates of Proficiency in Vaccination.[1]

13. No Candidate for a degree will be deemed to have attended a class as part of the Curriculum necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

VIII. With respect to the Places and Institutions at which the studies of the Candidate may be prosecuted, the following Regulations have effect:—

1. Two of the five years of medical study must be spent in the University of Edinburgh, each year of study including always the attendances specified in section VII., sub-section 2.
2. The remaining three years may be spent in any University of the United Kingdom, or in any Indian, Colonial, or Foreign University recognised for the purpose by the University Court, or in such Medical Schools or under such Teachers as may be recognised for the purpose by the University Court, each year of study during the first four years including always the attendances specified in section VII., sub-section 2.[2]
3. Of the subjects of study specified in section VII., sub-section 4, not less than eight must be taken in the University of Edinburgh, or (subject always to the provisions as to attendance contained in the immediately preceding sub-sections) in some other University of the United Kingdom, or in some Foreign or Colonial University entitled to confer the Degree of Doctor of Medicine, recognised for the purpose by the University Court, or in a College incorporated with, or affiliated to a University, entitled to confer the Degree of Doctor of Medicine, recognised for the purpose by the University Court: Provided always that where in any of said subjects of study two or more Courses are required, the taking of one of those Courses will constitute a taking of the subject for the purpose of this sub-section.
4. The remainder of such subjects of study may (subject always as aforesaid) be taken in such Medical Schools or under such

[1] The Candidate must produce a certificate from a Vaccine Department in an Hospital, Dispensary, or other public Institution recognised by the Local Government Board for instruction in Vaccination, to the effect that he has himself performed the operation successfully under the teacher's inspection; that he is familiar with the different stages of the vaccine vesicle, and with the method of preserving lymph, and is thoroughly informed in every necessary part of the subject. The recognised Vaccine Departments in Edinburgh are the Royal Public Dispensary, 21 West Richmond Street—*Vaccinator*, Dr Husband: the Western Dispensary, 90 Fountainbridge—*Vaccinator*, Dr J. B. Buist; and the New Town Dispensary, 17 Thistle Street—*Vaccinator*, Dr Caddell.

[2] Universities, &c., recognised under this sub-section.—University College, Dundee, and Royal Infirmary, Dundee, and all Indian, Colonial, or foreign Universities whose Courses of Instruction were accepted for purposes of graduation in Medicine under the old Ordinances.

Teachers as may be recognised for the purpose by the University Court.

5. All Candidates, not Matriculated Students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.
6. The Fee for attendance, for purposes of graduation, on the Courses of instruction of recognised Extra-Academical Teachers in Edinburgh, must be not less than the amount exigible for the corresponding Courses in the University.

   [*The fee must be paid at the commencement of the Course, and the Certificate must state the amount of the fee paid.*]
7. The University Court will not recognise as qualifying for examination in any of the subjects specified in section VII., sub-section 4, the class of any teacher who is at the time a teacher of more than one of the said subjects, except in those cases where Professors in the University are at liberty to teach the two subjects: Provided always that a Professor or other Teacher in any endowed public College or Institution, who, by the terms of his appointment, is required to teach more than one subject of Medical Study therein, may be recognised under sub-section 2 of this section as a Teacher of any one of the subjects which he teaches.
8. A Teacher, attendance on whose course of instruction, before the date of the approval of these Regulations by Her Majesty in Council, had been recognised for the purposes of graduation in the University, is not required to obtain a new recognition from the University Court; and attendance on the course of instruction of every such Teacher may continue to be recognised as heretofore.
9. It is in the power of the University Court, if it sees cause, at any time to withdraw or suspend any recognition which it may have granted.

IX. In the University of Edinburgh it is the duty of the Professors of the subjects specified in section VII., sub-section 4 hereof (except Practical Anatomy and such other subjects as the Senatus, with the approval of the University Court, may from time to time determine), so to conduct the Courses that Students may receive instruction sufficient for graduation in any one of the said subjects by attendance on one Course of five or six months, or of two and a half or three months as the case may be.

X. If any Candidate, before presenting himself for his Preliminary Examination, has attended in any University of the United Kingdom, or in any University or Institution specially approved, or

under any Teacher specially recognised for the purpose by the University Court, a Course or Courses of instruction in Physics, Chemistry, Botany, or Zoology, equivalent in the judgment of the Senatus to the qualifying Course in the same subject in the University of Edinburgh, such attendance will (notwithstanding anything hereinbefore stipulated) be held as entitling him to be examined in these subjects; and if the Candidate has attended such Course or Courses in each of the said subjects, he will be held to have completed his first year of Medical Study: Provided always that the evidence of such attendance at such equivalent Course or Courses must be presented to the Senatus at the time when the Candidate presents himself for his Preliminary Examination; and the Senatus will, if satisfied, grant a certificate to that effect.

By a Supplementary Ordinance of the Commissioners, the provisions of this section shall not have effect except where the University Court shall allow the application after a report by the Senatus, setting forth special grounds therefor.

PROFESSIONAL EXAMINATION FOR M.B. AND Ch.B.

XI. Each Candidate is examined, both in writing and orally, and also clinically where the nature of the subject admits, in the following divisions, viz.:—*First*, in Botany, Zoology, Physics, and Chemistry; *Second*, in Anatomy, Physiology, and Materia Medica and Therapeutics; *Third*, in Pathology, and Medical Jurisprudence and Public Health; *Fourth*, in Surgery and Clinical Surgery, Practice of Medicine and Clinical Medicine, and Midwifery.

In subjects which admit of practical instruction, the examination will be such as to test the practical acquirements of the Candidate.

If a Candidate for the Degrees of M.B. and Ch.B. have completed, in a University of the United Kingdom, a course of study and passed an examination in Botany, Zoology, Physics, or Chemistry qualifying for a Degree in Science or in Arts, he shall be held to have passed the examinations in such subject or subjects.

If a Candidate have obtained a Degree in Science or in Arts in any University other than a University of the United Kingdom, granted in either case after a course of study and an examination in Botany, Zoology, Physics, or Chemistry, it shall be in the power of the University Court to exempt such Candidate from the examinations in such subject or subjects; provided that the course of study and the standard of examination in each case are satisfactory in the judgment of the Senatus Academicus.[1]

XII. Candidates who profess themselves ready to submit to an examination in the subjects comprised in the first division, viz., Botany, Zoology, Physics, and Chemistry, may be admitted to examination in

[1] The Courses of study, and the Examinations of the University of New Zealand are recognised.

all or any two of these subjects at any examination held after they have attended a full Course in each of the subjects professed.

XIII. Candidates who have passed their examinations in the subjects comprised in the first division may be admitted to examination in the second division at the end of the third winter session.

Provided that Candidates who so desire may postpone their examination in Materia Medica and Therapeutics until the close of the summer session following.

XIV. Candidates who have passed their examinations in the subjects comprised in the first and second divisions may be admitted to examination in the third division at the end of the fourth winter session.

Provided that Candidates who so desire may postpone their examination in Medical Jurisprudence and Public Health until the close of the summer session following.

XV. Candidates who have passed their examinations in the subjects comprised in the first, second, and third divisions may be admitted to examination in the fourth or final division, when they have completed the fifth year of study.

XVI. If any Candidate at these examinations be found unqualified in one or more subjects, he will not again be admitted to examination unless he has pursued his medical studies for such time, and subject to such conditions, as the Faculty of Medicine may prescribe.[1]

XVII. If any Candidate at these examinations be found to have passed in one or more subjects with sufficient merit, he will not be liable to re-examination in such subject or subjects, although he may have been found unqualified in a subject or subjects comprised in the same division as hereinbefore specified.

XVIII. Every Candidate must deliver,[2] on or before such day as the Senatus may from time to time determine, to the Dean of the Faculty of Medicine, a declaration, in his own handwriting, that he has completed his twenty-first year, or that he will have completed it on or before the day of graduation, and that he will not be, on the day of graduation, under articles of apprenticeship to any surgeon or other master.

XIX. After the Candidate has satisfied the Examiners, the Dean of the Faculty of Medicine lays the proceedings before the Senatus, by whose authority the Candidate will be admitted, on such day as the Senatus may from time to time appoint, to the Degrees of M.B. and Ch.B., on payment of the required fees.

XX. Candidates for graduation must produce evidence of their having conformed to the Regulations which were in force at the time they commenced their Medical Studies.

[1] Satisfactory Certificates must be produced when Candidates re-enter for Examination, and the fees paid to Extra-Academical teachers in Edinburgh for re-attendances must be of the same amount as those payable for the corresponding classes in the University, and the Certificates of attendance must show the amount of the fees paid.

[2] On or before the date for lodging Certificates, &c., for the fourth division of the Examinations. See page 622. A declaration is appended to the Schedule for the Final Examination, which must be attested and signed before the Schedule is lodged.

PROFESSIONAL EXAMINATION FOR M.D.[1]

XXI. 1. Subject to the conditions hereinafter specified, the Degree of M.D. is conferred on any Candidate who has obtained the Degrees of M.B. and Ch.B., and is of the age of twenty-four years or upwards, and has produced a certificate of having been engaged, subsequently to having received the Degrees of M.B. and Ch.B., for at least one year in attendance in the Medical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Military or Naval Medical Services, or for at least two years in Practice other than Practice restricted to Surgery.

This Examination in Clinical Medicine for each Candidate consists of a written Report and Commentary, with any oral questions that may be considered desirable, upon at least three Medical cases. In the selection of the cases, special regard should be given to the opportunities they afford for testing the Candidate, not only in the ordinary methods of clinical investigation, but also in the more advanced methods requiring practical knowledge in the applications of the ophthalmoscope and laryngoscope, in the chemical and microscopical examination of excreta, the quantitative determination and microscopic characters of the chief constituents of blood possessing clinical importance, the recording by instruments of the condition of the circulation, the applications of electricity, &c. : Provided always that one of the three cases on which a Candidate shall be examined may be the case of a patient suffering from a Gynecological or Mental Disease, or Disease of Childhood, if the Candidate on entering his name for the Examination declare a wish to this effect. So far as possible, the Examination in these Departments will be on a standard equal to that of the Examination on the Medical cases.

2. Each Candidate for the Degree of M.D. is required to pass an examination in Clinical Medicine and in such of its special departments as may from time to time be determined ; and he may present himself for examination in Clinical Medicine at any period of examination subsequent to one year after he has received the Degrees of Bachelor of Medicine and Bachelor of Surgery.

3. Each Candidate for the Degree of M.D. must submit for the approval of the Faculty of Medicine a Thesis, on any branch of knowledge comprised in the second, third, or fourth examinations for the Degrees of M.B. and Ch.B., which he

[1] Candidates, settled for a period of years in foreign parts, who have complied with all the regulations for the Degrees of M.D. and Ch.M., but who cannot appear personally to receive the Degree, may, on satisfying the Senatus to that effect, by production of sufficient official testimonials, have the Degree conferred on them in absence.

may have made a subject of study after having received those Degrees, excepting subjects which are exclusively Surgical; and the Thesis, accompanied by a declaration signed by the Candidate, that the work has been done and the Thesis composed by himself, must be lodged with the Dean of the Faculty of Medicine on or before a date to be fixed by the Senatus.[1]

4. A Bachelor of Medicine and Bachelor of Surgery, who produces to the Senatus satisfactory evidence of his intention of entering within twelve months after obtaining such degrees on the practice of his profession in a British Possession or Colony, or in a foreign Country, may, under Regulations to be framed by the Senatus, be admitted to the examination in Clinical Medicine at any period of examination after he has received such Degrees; but the Degree of M.D. will not be conferred on him unless he produces a certificate that, subsequently to having received the Degrees of M.B. and Ch.B., he has been engaged for at least one year in attendance in the Medical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Naval or Military Medical Services, or for at least two years in Practice which has not been exclusively surgical, and unless his Thesis, in the judgment of the Faculty of Medicine, is of exceptional merit.

Bachelors of Medicine and Masters of Surgery of the University of Edinburgh, who have graduated under the regulations in force before 5th August 1892, may proceed to the Degree of Doctor of Medicine under the provisions of this section in the same manner as if they held the Degree of Bachelor of Surgery.

PROFESSIONAL EXAMINATION FOR CH.M.[2]

XXII. 1. Subject to the conditions hereinafter specified the Degree of Ch.M. will be conferred on any Candidate who has obtained the Degrees of M.B. and Ch.B. of the University, and is of the age of twenty-four years or upwards, and has produced a certificate of having been engaged, subsequently to his having received the Degrees of M.B. and Ch.B., for at least one year in attendance in the Surgical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Military or Naval Medical Services, or for at least two years in practice other than practice restricted to Medicine.

[1] Candidates are required to write their Theses on faint lined paper, 11 in. by 8½ in. with margins 1½ in. at each side. The Thesis is to be written on one side of each leaf only, and it must be lodged on or before 30th April of the year in which the Candidate proposes to graduate.

[2] See footnote 1, page 602.

2. Each Candidate for the Degree of Ch.M. is required to pass an examination in the following subjects :—Surgical Anatomy, Operations upon the dead body, and Clinical Surgery, and in such of the special departments of Clinical Surgery as may from time to time be determined ; and he may present himself for examination in these subjects at any period of examination subsequent to one year after he has received the Degrees of M.B. and Ch.B.

   The Examination in Clinical Surgery for the Degree of Master of Surgery should for each Candidate consist of a written Report and Commentary, with any oral questions that may be considered desirable, on at least three Surgical cases : Provided that one of the three Surgical cases on which a Candidate shall be examined may be the case of a patient suffering from an Eye, Throat, Ear, or Gynecological Disease, if the Candidate on entering his name for the Examination declare a wish to this effect. So far as possible, the Examination in these Departments shall be on a standard equal to that of the Examination on the Surgical cases. The Candidates shall also be examined in Surgical Anatomy and Operations upon the dead body.

3. Each Candidate for the Degree of Ch.M. must submit, for the approval of the Faculty of Medicine, a Thesis on any branch of knowledge comprised in the second, third, or fourth Examinations for the Degrees of M.B. and Ch.B., which he may have made a subject of study after having received those Degrees, excepting subjects that are exclusively medical ; and the Thesis, accompanied by a declaration signed by the Candidate that the work has been done and the Thesis composed by himself, must be lodged with the Dean of the Faculty of Medicine on or before a date to be fixed by the Senatus.[1]

4. A Bachelor of Medicine and Bachelor of Surgery who produces to the Senatus satisfactory evidence of his intention of entering within twelve months after obtaining such Degrees on the practice of his profession in a British Possession or Colony, or in a foreign Country, may, under Regulations to be framed by the Senatus, be admitted to examination in the subjects specified in sub-section 2 of this section at any period of examination after he has received such Degrees ; but the Degree of Ch.M. shall not be conferred on him unless he produces a certificate that, subsequently to having received the Degrees of M.B. and Ch.B., he has been engaged for at least one year in attendance in the Surgical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Naval or Military Medical Services, or for at least two years in Practice which has not been exclusively medical, and unless his Thesis in the judgment of the Faculty of Medicine is of exceptional merit.

[1] See footnote 1, page 603.

REGULATIONS FOR GRADUATION OF WOMEN.

1. It shall be in the power of the University Court to admit Women to graduation.

2. The conditions for graduation shall be the same for women as for men, subject to the following modifications, which shall have effect until provision is made for the instruction of women in all the subjects qualifying for graduation, in which provision is made for the instruction of men.

3. Section VIII. of Regulations for Degrees in Medicine shall not be applicable to the graduation of women in Medicine.

So long as within the Faculty provision is not made for the instruction of women in any subject qualifying for graduation in which provision is made for the instruction of men, it shall be in the power of the University Court to admit to graduation women who have received the requisite instruction in that subject in any University of the United Kingdom, or in any Indian, Colonial, or Foreign University recognised for the purpose by the University Court, or in such Medical Schools or under such teachers as may be recognised for the purpose by the University Court: Provided always that every Candidate for graduation shall produce evidence of having satisfied the conditions laid down in the Regulations for Degrees in Medicine with respect to the Preliminary Examination, and shall be examined in all the subjects necessary for graduation by the Examiners of the University.

4. So soon as within the University provision is made for the instruction of women in all subjects qualifying for graduation in which provision is made for the instruction of men, the conditions for the graduation of women shall be the same as the conditions for the graduation of men.

5. In the case of women who began their studies before these Regulations came into operation, it shall be competent to the University Court to admit to graduation in Medicine women who may complete their medical studies in accordance either with the Regulations for graduation hitherto in force, or with the present Regulations; declaring that as regards their studies prior to the date at which these Regulations came into operation (1st October 1892), such women may have obtained their instruction in any classes which the University Court may accept for the purpose, and providing that before beginning their medical studies they shall have passed a Preliminary Examination which the University Court shall consider to have been adequate.

6. Women who attend classes in the University must matriculate, paying a fee of the same amount as that exigible for other students. Women, who are Candidates for graduation but not matriculated students, and who may attend classes in Edinburgh under the provisions above set forth, must, at the commencement of each year of such attendance, enrol their names in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by students of the University.

Additional Regulations of the University Court.

When granting recognition to Medical Schools or Teachers for the medical instruction of women, the University Court requires that the classes shall not be mixed classes, except on special cause shown.

The University Court have recognised the Edinburgh School of Medicine for Women, Surgeon Square, Edinburgh, and the Medical College for Women, 30 Chambers Street, Edinburgh, as Medical Schools whose courses of instruction qualify for graduation in Medicine, subject to the following conditions:—Provided 1. That every Candidate for graduation shall produce evidence of having satisfied the conditions with respect to the Preliminary Examination and Registration as Medical Students, and shall be examined in all the subjects necessary for graduation by the Examiners of the University in which she takes her degree. 2. That the fees charged for classes or courses of instruction qualifying for graduation shall not be less than the fees for the corresponding courses of instruction within the University. 3. That the students attending either of these Schools shall be free to take a class or classes separately in either the one or the other of the Schools. 4. That all students not matriculated students of the University attending these Schools for purposes of graduation must, at the commencement of each year of such attendance, enter their names in a book to be kept in the University for that purpose, paying a fee of the same amount as the matriculation fee paid by students of the University, and having, in respect of such payment, a right to the use of the Library of the University. 5. That each of the aforesaid Schools make application annually to the University Court for a continuation of the recognition thus granted, and at the same time report to the Court on the administrative arrangements and discipline of the School. 6. That schedules of Class Returns, to be furnished by the Court, and giving the designation of the class or course, number of students, number of meetings, &c., be filled up by each of the teachers of the qualifying classes or courses of instruction in the aforesaid Schools, as in the case of the recognised Lecturers on Medicine, and forwarded to the Secretary of the Court not later than 1st July in each year. 7. That all advertisements referring to the recognition of the aforesaid Schools, or to the qualifying classes or courses of instruction to be given at any time in connection with these Schools, shall, before publication, be submitted to the Secretary of Senatus of the University, and receive his approval.

Regulations for Special Study and Research, and for the Appointment of Research Fellows.

I. The Senatus Academicus, with the approval of the University Court, may make regulations under which Graduates of Scottish Universities or of other Universities recognised by the University Court for the purposes hereof, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or re-

search, may be admitted to prosecute such study or research in the University.

II. It is the duty of the Senatus (1) To receive and decide upon all applications for admission to prosecute special study or research. (2) To prepare a list of all persons so admitted (hereinafter referred to as Research Students). (3) To make regulations for the supervision of their work. (4) To satisfy themselves from time to time that the Research Students are carrying on their work in the University in a satisfactory manner. (5) To suspend or exclude from any course any student whose conduct or progress is unsatisfactory.

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III. Every applicant for admission must send in to the Senatus a written application stating any degree or other distinction which he has already obtained, the line of study or research which he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. Any application for admission shall be in the first instance referred by the Senatus to the appropriate Faculty, or to a Committee appointed by the Senatus; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—

(*a*) That his proposed line of study or research is a fit and proper one; (*b*) That he possesses a good general education; (*c*) That he is of good character; (*d*) That he proposes to prosecute his studies or research during a period to be approved by the Senatus Academicus.

The Faculty or the Committee shall make a report to the Senatus upon each application. It shall also be their duty, subject to the regulations of the Senatus, to provide for the supervision of the Research Student's work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student shall be required to matriculate each year, paying the ordinary fee.

VI. Research Students shall have access to and the use of the University Laboratories and Museums, under such conditions as to payment and otherwise as the University Court, after consultation with the Senatus, may determine.

VII. The title of Research Fellow may be conferred by the Senatus, with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow under the powers of Section XI., Sub-section 8, of Ordinance 27.

VIII. (1) The Research Fellows shall be appointed as aforesaid after consideration of the report or reports submitted in terms of Section IV. hereof. (2) The title of Research Fellow may be conferred either at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus Academicus may determine. (3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer. (4) Research Students who have been appointed Research Fellows shall continue to be subject to the conditions above prescribed as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may, subject to the provisions of Section XI., Sub-section 8, of Ordinance No. 27, Edinburgh No. 6, provide such sums as it may think fit in aid of the expenses of Special Study or Research.

REGULATIONS FOR THE DEGREE OF D.SC.

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I. Research Students within the meaning of the Regulations for the Encouragement of Special Study and Research and for the appointment of Research Fellows, may offer themselves for the degree of D.Sc. of the University in which they have prosecuted some special study or research under those Regulations, although they have not taken the degree of B.Sc. or the degree of M.A. with honours in that University; provided—

(1) That they hold the degree of B.Sc. or M.B. or a Scottish or any recognised University, or a degree of any such University, which the Senatus shall hold to be equivalent to the degree of B.Sc. or to the degree of M.A. with first or second class honours in Mathematics and Natural Philosophy; provided that Candidates who hold any such degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of D.Sc., to pass an examination equivalent to an Honours or to a Final Science examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

II. All Candidates for the degree of D.Sc. shall present a thesis or a published memoir or work, to be approved by the Senatus on the recommendation of the Faculty of Science; provided that, if required by the Senatus, the Candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his thesis, as may from time to time be determined. The thesis shall be a record of original research undertaken by the Candidate, and shall be accompanied by a declaration signed by him that the work has been done and the thesis composed by himself.

III. Notwithstanding and in supplement of the provisions of Regulations as to Examinations, sections XIV. and XV., the Senatus shall appoint such Professors or Lecturers as it may think suitable to conduct the examination of Candidates who may offer themselves under the provisions of the Regulations for Degrees in Science, or of these Regulations for the Degree of D.Sc., and the University Court shall, after consultation with the Senatus Academicus, appoint an additional Examiner to act along with them. Such additional Examiner shall be a person of recognised eminence in the subject of the thesis, or memoir, or work which is to be submitted for approval. The result of the examination shall be reported to the appropriate Faculty or Committee of Senatus.

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V. The degree of D.Sc. shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

VI. The fee to be paid for the degree of D.Sc. is ten guineas, payable when the Candidate lodges his thesis. Fee for re-examination, £5, 5s.

REGULATIONS OF THE JOINT BOARD FOR THE PRELIMINARY EXAMINATION FOR DEGREES IN MEDICINE AND SURGERY, SUPPLEMENTARY TO SECTIONS III.-VI. INCLUSIVELY, PAGES 593 AND 594.

For the Medical Preliminary Examination, the papers set in Latin, Greek, and Mathematics, shall be the same as those set on the Lower Standard in these subjects in the Arts and Science Preliminary Examination.[1]

The papers set in English (i) In October 1896, shall be of a Lower Standard than the papers set in this subject in the Arts and Science Preliminary Examination.[1]

(ii) In and after April 1897 the papers set in English shall no longer be of the same character as the paper on English in the Arts and Science Examination; no set books shall be prescribed, nor shall a general knowledge of the life and works of the greater authors be expected of Candidates, but one or two questions may be set, giving an opportunity to Candidates to show a knowledge of famous literary works. The

[1] See pages 128-130.

historical questions shall not be confined to any one period, but shall cover the whole of British History, and shall be set in such a way as to give an opportunity to Candidates who have confined their studies to a single period to show their knowledge. A single three hours' paper shall be set, containing an Essay, a Paraphrase, two questions on History, two on Geography, four on Grammar (including Correction of Sentences, Parsing, Analysis of Sentences, and Derivations), two of a literary and general kind. Eight answers shall be required. The Essay, the Paraphrase, one answer on History, and one on Geography shall be compulsory.

N.B.—In October 1896, alternative papers will be set in English, one on the lines laid down in paragraph (i), and the other on the lines laid down in paragraph (ii), and Candidates may select whichever paper they prefer.

The papers set in French and German shall be of a Lower Standard than those set in these subjects in the Arts and Science Preliminary Examinations.[1]

It shall be in the option of any Candidate for the Medical Preliminary to take the papers set on the Higher Standard for the Arts Preliminary in any of the subjects.

Excellence in one or more subjects will be permitted to compensate in some measure for deficiency in any of the other subjects. Such excellence may be shown either by attaining a high percentage of marks on the Lower Standard, or by passing on the Higher Standard.

Candidates who, having taken English, Latin, Greek, Mathematics, or a Modern Language, on the Higher Standard, as prescribed by the Regulations for the Arts and Science Preliminary, have obtained a satisfactory percentage of marks, shall be held to have passed the Medical Preliminary in these subjects, provided that all the subjects required by the Regulations of the General Medical Council are taken at the same time.

For subjects of Examination, see Regulations for Latin (Lower Standard), Greek (Lower Standard), Mathematics (Lower Standard), French and German, under Arts and Science Preliminary Examination.[1]

Examinations Accepted as Exempting from the Preliminary Examination in Medicine.

Provided always that the Regulations of the General Medical Council regarding the Registration of Students of Medicine be complied with.

1. In terms of the Regulations for Degrees in Medicine and Surgery, "a Degree in Arts or in Science (not being a Degree *honoris causa tantum*) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University, specially recognised for the purpose by the University Court, shall exempt from the Preliminary Examination."

[1] See pages 128-130.

In virtue of the powers conferred on them by the Medical Regulations, Section VI., page 594, the Joint-Board have resolved as follows :—

2. Any Candidate who produces a Certificate of having passed the Preliminary Examination in Arts or Science in any Scottish University, either at the University Examination or through the Leaving Certificates of the Scotch Education Department, or partly at the University Examination, and partly through the Leaving Certificates, shall be held to have passed the Preliminary Examination for Medicine, provided that the Examination has included the specified subjects of General Education as required under the Regulations of the General Medical Council, and by the Regulations for Graduation in Medicine and Surgery (Sections III.-VI. inclusive, pages 593 and 594.)

3. A Candidate who has passed the Arts and Science Preliminary Examination of the Joint Board in any subject (Higher Grade where there is more than one) recognised for the Medical Preliminary Examination, shall be exempted from further examination in that subject in the aforesaid Preliminary Examination.

4. A Candidate who has obtained the Leaving Certificate (Honours or Higher Grade) of the Scotch Education Department in any subject recognised for the Medical Preliminary Examination, shall be exempted from further examination in that subject in the aforesaid Preliminary Examination.

The Regulation that all the subjects of the Examination shall be passed at one and the same time shall not be held to apply to either of the above cases, 2, 3, and 4. But Candidates complying with these Rules (2, 3, and 4) must obtain a University Certificate specifying the Examinations passed by them which have been accepted as equivalents to the Preliminary, and must present said Certificate to the Medical Registrar in order to registration.

Further, each such Candidate when applying for said Certificate must, if he has not entered for any part of the Preliminary, produce a Matriculation Card from some one of the Scottish Universities.

5. Lower Grade Leaving Certificates of the Scotch Education Department will only be accepted as exempting from the Medical Preliminary Examination, provided the examinations in all the requisite subjects have been taken and passed at one and the same time.

6. The following English and Irish University Examinations will be accepted (provided they include all the subjects required under the Regulations of the General Medical Council, and prescribed by the Medical Ordinances of the Scottish University Commissioners, see Sections III.-VI. inclusive of Regulations for Graduation in Medicine and Surgery, pages 593 and 594), viz. :—

Oxford.—Responsions, provided the Candidate pass the Examination of the Joint Board in English ; Moderations, provided that Candidates who have passed it prior to Michaelmas 1896 shall pass the Examination of the Joint Board in English. After Michaelmas

1896 the Previous Examination will be accepted as exempting *in toto.*

Cambridge.—Previous Examination.

Oxford.—Senior Local Examinations will be accepted *pro tanto*, provided that, as regards English, the Certificates shall bear that the Candidate has passed in Division 1 of the subject, and in either Division 3, 4, or 5.

Oxford.—Higher Education for Women will be accepted *pro tanto.*

Cambridge.—Senior Local Examinations will be accepted *pro tanto.*

Cambridge.—Higher Local Examinations will be accepted *pro tanto.*

Oxford and Cambridge Schools Examinations.—Higher Certificate will be accepted *pro tanto*, provided that, as regards Mathematics, the Certificate shall bear that the Candidate has passed in both Elementary and Additional Mathematics; the Lower Certificate will be accepted *pro tanto* only till October 1897 inclusive.

London University.—Matriculation Examination.

Dublin, Trinity College.—Public Entrance Examination.

Royal University of Ireland.—Matriculation Examination.

Victoria University.—Preliminary Examination; Entrance Examination in Arts.

By *pro tanto* is here meant that a certificate of having passed in the Examination referred to in any subject required for the Medical Preliminary Examination, shall, as regards that subject, exempt from further Examination in the said Preliminary Examination.

7. The Examinations of the following Indian, Colonial, and Foreign Universities and Colleges, will be accepted (provided the Examinations include all the subjects required by the General Medical Council, and prescribed by the Medical Ordinances of the Scottish University Commissioners—see Sections III.-VI. inclusive of Regulations for Graduation in Medicine and Surgery, pages 593 and 594), viz. :—

Universities of (1) *Calcutta*, (2) *Madras*, and (3) *Bombay.*—Entrance Examination. Certificate to include Latin.

Universities of (1) *Cape of Good Hope.*—Matriculation Examination; (2) *Tasmanian*—Matriculation Examination; (3) *New Zealand*—Matriculation and Medical Preliminary Examination; (4) *Melbourne*—Matriculation Examination; (5) *Sydney*—Matriculation Examination; (6) *Adelaide*—Matriculation Examination; or its substitute, the Senior or Junior Public Examination.

The University of Fredericton, New Brunswick.—Matriculation Examination.

The Western University of Ontario.—Matriculation Examination.

University of Manitoba.—Previous Examination.

Codrington College (Barbados).—English Certificate for Students of two years' standing, and Latin Certificate, or "Testamur."

Germany and other Continental Countries.—Gymnasial Abiturienten-Examen, and corresponding Entrance Examinations to the Universities.

The Provincial Education Department of Ontario.—Departmental Pass Arts Matriculation Examination.
Trinity University, Toronto.—Matriculation Examination.
The University of Toronto.—Senior or Junior Matriculation Examination.
Queen's College and University, Kingston.—Matriculation Examination.
M'Gill University.—Matriculation Examination.
King's College, Windsor, Nova Scotia.—Responsions.
Dalhousie College Halifax.—Matriculation Examination.
Mount Allison College, Sackville, New Brunswick.—Matriculation Examination.
The University of Winnipeg.—Preliminary Examination in Arts.
Victoria College, Upper Canada.—Matriculation Examination.
The University of Halifax, Nova Scotia.—Matriculation Examination.

8. In the case of Candidates for the Medical Preliminary Examination, who hold qualifications from Foreign or Colonial Bodies, other than Universities, whose certificates are not included in the list of Equivalent Examinations issued by the Joint Board, a Committee in each University, consisting of the Deans of the Faculties of Arts, Science, and Medicine, is empowered to accept such certificates, if it deems them sufficient, provided that all such cases are reported to the Joint Board at their meeting next following.

DATES OF ENTERING FOR PRELIMINARY EXAMINATION AND FOR PAYMENT OF FEES.

Each Candidate is required to pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

Candidates for Examination may obtain Schedules at the Matriculation Office, University (Old) Buildings, on and after 4th September, and on and after 15th February. The Schedules must be completed and returned along with the fees not later than 18th September 1896 and 1st March 1897 for the autumn and spring Examinations respectively.

Candidates may pay the fees personally or transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts* crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts. When names are not entered and Fees paid on or before the stated dates, an additional or late entry fee of 10s. must be paid before the Candidate can be admitted to Examination. A Candidate is not held to have entered until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

TIME-TABLE FOR PRELIMINARY EXAMINATIONS FOR 1896-97.

			Medical Preliminary Examinations.	Arts and Science Preliminary Examinations.
1896.				
Sept.	26	Sat.	English, 9-11, 12-2 Do. New model, 9-12 Greek, 3-6 Do., 3-5[1]	English, 9-11, 12-2 Lower Greek, 3-6
,,	28	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12 Lower Mathematics, 2-5
,,	29	Tu.	French, 3-6 Do., 3-5[1]	Higher Latin, 9-11, 12-2 French, 1st paper, 3-4.30
,,	30	Wed.	German, 3-6 Do., 3-5[1]	Higher Greek, 9-11, 12-2 German, 1st paper, 3-4.30
Oct.	1	Th.	Higher Mathematics, 9-11, 12-2.[1]	Intermediate and Higher Mathematics, 9-11, 12-2 French, 2nd paper, 3-5
,,	2	Fri.	Moral Philosophy, 9-11[1] Mechanics, 1-4[1]	German, 2nd paper, 9-11 Dynamics, 1-4
,,	3	Sat.	Natural Philosophy, 9-11[1] Logic, 2-4[1]	
1897.				
Mar.	27	Sat.	English, 9-12 Greek, 3-6 Do., 3-5[1]	English, 9-11, 12-2 Lower Greek, 3-6
,,	29	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12 Lower Mathematics, 2-5
,,	30	Tu.	French, 3-6 Do., 3-5[1]	Higher Latin, 9-11, 12-2 French, 1st paper, 3-4.30
,,	31	Wed.	German, 3-6 Do., 3-5[1]	Higher Greek, 9-11, 12-2 German, 1st paper, 3-4.30
Apr.	1	Th.	Higher Mathematics, 9-11, 12-2[1]	Intermediate and Higher Mathematics, 9-11, 12-2 French, 2nd paper, 3-5
,,	2	Fri.	Moral Philosophy, 9-11[1] Mechanics, 1-4[1]	German, 2nd paper, 9-11 Dynamics, 1-4
,,	3	Sat.	Natural Philosophy, 9-11[1] Logic, 2-4[1]	

[1] For Students completing the Examination under the Old Regulations.

REGULATIONS AS TO CLASS EXAMINATIONS.

With a view to promote the Educational interests of the students during the time they are occupied with the respective subjects in the Classes, the Senatus recommend :—

1. That there should be at least two Special Class-Examinations in the Classes in the Faculty of Medicine during each Session, conducted by means of questions and written answers, without aid from books or notes.

2. That in the event of a student gaining 75 per cent. or more of the available marks in any department, he shall obtain a Certificate in the First Class of Honours.

3. That in the event of a student gaining 50 per cent. or more, but less than 75 per cent., of the available marks in any department, he shall receive a Certificate in the Second Class of Honours.

University Bronze Medals are also given for Competitive Class Examinations.

CERTIFICATES OF ATTENDANCE ON CLASSES IN THE FACULTY OF MEDICINE.

The Senatus Academicus have resolved that the Certificates of Attendance to be granted to students in the Faculty of Medicine shall be regulated in the following manner :—

Each Professor shall ascertain the presence of his pupils at least twenty-six times in a Course of six months' duration, and thirteen times in a Course of three months' duration.

Those who have been absent twelve or more times in a six months' Course, or six or more times in a three months' Course, or have not duly performed the work of the Class, including any Examinations that may be held, shall not be entitled to any Certificate.

The following is the form of Certificate which must be adopted in all cases :—

"I certify that Mr attended my Course of Instruction on during the Session ; that he was present on of the occasions on which attendance was ascertained ; and that he duly performed the work of the class."

Exceptions will be admitted in the case of those who may be absent from sickness or other unavoidable causes, the particulars of which must be stated to the Professor in writing, accompanied with certificates. All excuses for non-attendance must be given in immediately upon the student returning to his class. But if any student shall have been absent for six weeks or upwards, in a Course of six months, or for three weeks in a Course of three months (whatever the cause of absence may be), his case must be transmitted to the Dean of the Faculty for the decision of the Faculty.

Whenever the student's cause for absence shall be admitted by the Professor or by the Faculty, the Certificate shall bear that he "attended," and shall state the amount of the irregularity and the nature of the excuse.

FIRST PROFESSIONAL EXAMINATION.

The Faculty of Medicine have resolved that the written and oral examinations on Chemistry, Elementary Botany, Elementary Zoology, and Physics shall be restricted in the following manner :—

1. *Chemistry.*—Chemical changes as distinguished from physical changes. Elements ; compounds ; mixtures. Laws of chemical combination by weight and by volume. The atomic theory. Atoms ; molecules. Avogadro's Hypothesis. Molecular weights of gaseous and volatile substances. Atomic weights. Law of Dulong and Petit. Chemical Notation—Symbols ; formulæ ; equations. Simple chemical calculations.

The non-metallic elements and their chief compounds ; especially the compounds of oxygen, of hydrogen, and of chlorine with the other non-metals. The more important inorganic acids. The atmosphere. Combustion. Oxidation and reduction.

The following metallic elements and their chief compounds ; especially those with oxygen, with chlorine, and with sulphur : Gold, platinum, silver, mercury, lead, antimony, tin, copper, bismuth, zinc, iron, aluminium, chromium, manganese, barium, strontium, calcium, magnesium, potassium, sodium.

The following salts : the ammonium salts ; the more important sulphates, sulphites, thiosulphates, nitrates, nitrites, carbonates, bromides, iodides, iodates, phosphates, borates, silicates.

The relations of bases, acids, and salts. Electrolysis. Quantivalence. The periodic law.

The metallurgy of silver, mercury, copper, lead, tin, zinc, iron. Alloys, such as brass, bronze, solder, type-metal. Amalgams.

The manufacture of aluminium, magnesium, potassium, sodium, glass, porcelain, mortar, gunpowder, sulphuric acid, sodium carbonate and bicarbonate, caustic soda, bleaching powder and chlorates, wrought-iron, steel, white lead.

Classification of Carbon Compounds. Marsh Gas and its Homologues. Chloroform. Methyl and Ethyl Alcohols and Ethers. Substituted ammonias and ammonium salts. Formic and Acetic Acids, Aldehyde, Acetone, Chloral, Olefiant Gas, Oxalic Acid, Lactic Acid. Tartaric Acid, Citric Acid. Fats and Oils, Saponification, Glycerine. Cellulose, Sugars, Starch. Distillation of Wood and of Coal. Benzene, Benzoic Acid, Phenol, Salicylic Acid, Oil of Bitter Almonds. Hydrocyanic Acid, Cyanides, Cyanates, Thiocyanates, Urea, Uric Acid.

Simple Qualitative Analysis. The examination in this is conducted practically. Candidates are required to examine unknown *single salts* for both metallic and salt radicals, as contained in the following lists :—

Silver, Mercurous, Mercuric, Cupric, Lead, Stannous, Stannic, Bismuth, Antimony (*Tartar Emetic* may be given), Arsenious, Zinc, Manganous, Ferrous, Ferric, Chromic, Aluminium, Calcium, Barium, Strontium, Magnesium, Ammonium, Sodium, Potassium.

Carbonate, Sulphite, Thiosulphate, Sulphide, Hypochlorite (Bleaching solution), Nitrite, Chloride, Bromide, Iodide, Cyanide, Sulphate, Chromate, Orthophosphate, Arseniate, Arsenite, Borate, Oxalate Nitrate, Chlorate, Acetate.

At the examination, Candidates are supplied with the following reagents, &c. :—Acetic Acid, dilute Hydrochloric Acid, dilute Nitric Acid, Sulphuric Acid, dilute Sulphuric Acid, Alcohol, Iodine, Ammonia, Ammonium Carbonate, Ammonium Chloride, Ammonium Oxalate, Ammonium Sulphide, Barium Nitrate, Bleaching Powder, Calcium Chloride, Calcium Hydrate, Calcium Sulphate, Cobaltous Nitrate, Cupric Sulphate, Ferric Chloride, Ferrous Sulphate, Lead Acetate, Magnesium Sulphate, Mercuric Chloride, Potassium Carbonate, Potassium Chromate, Potassium Ferricyanide, Potassium Ferrocyanide, Potassium Hydrate, Potassium Iodide, Silver Nitrate, Sodium Bitartrate, Sodium Phosphate, Sodium Sulphite, Stannous Chloride, Sulphuretted Hydrogen. *Solids*—Manganese Dioxide, Sodium Carbonate, Borax, Sulphur, Zinc, Copper.

Test papers :— Blue Litmus, Red Litmus, Plain, Starch, Turmeric.

Bunsen Burner, Test Tubes.

2. *Elementary Botany.*—The characteristic features of the following groups and classes of the vegetable kingdom :—

Thallophyta [Schizophyta, Algæ, Fungi]; Muscineæ [Hepaticæ, Musci]; Pteridophyta [Filicineæ, Equisetineæ, Lycopodineæ]; Phanerogamæ [Gymnospermæ, Angiospermæ (Monocotyledones, Dicotyledones)].

The fundamental facts and principles of Morphology (including Anatomy, Histology, and Development) and Physiology. The life-history of the following plants :—Bacterium, Saccharomyces, Mucor, Vaucheria, Eurotium, Funaria, Aspidium, Pinus, Scilla, Helianthus, Ulmus ; and the characters of plants belonging to the following natural orders of Phanerogamæ :—Coniferæ, Gramineæ, Orchideæ, Liliaceæ, Urticaceæ, Labiatæ, Compositæ, Umbelliferæ, Rosaceæ, Leguminosæ, Cruciferæ, Ranunculaceæ.

3. *Elementary Zoology.*—(*a*) The General Principles of Biology.

(*b*) The distinctive characters of the Invertebrate groups, and the structure, habits, &c., of Amœba, Paramœcium, Hydra, Arenicola, Hirudo, Anodon, Helix, Nephrops, and Periplaneta.

(*c*) The distinctive characters of the Chordata groups, and the structure, habits, &c., of Myxine, Raia, Rana, Columba, Ornithorhynchus, Macropus, Lepus, Ovis, and Canis.

(*d*) The skeletons of Crocodilus, Equus, Felis (skull only), Balæna, Vespertilio, and Troglodytes.

(*e*) A general knowledge of the orders of Mammalia.

(*f*) The life-histories of Gregarina, Distoma, Tænia, Ascaris, Trichina, and Filaria.

(*g*) The outlines of the development of Amphioxus, Scyllium, and Rana, and of the fœtal appendages of Gallus and Lepus.

(*h*) The principles of the Geographical Distribution of Animals, and the Distribution of the Mammalia.

4. *Physics.*—(*a*) Properties of Matter—including Inertia, Gravitation, Molecular Forces, &c.

(*b*) Abstract Dynamics—including Kinematics and Newton's Laws of Motion, with their consequences as regards Statics and Kinetics of Solid, Liquid, and Gaseous Bodies, with the Physical Measurement of Time.

(*c*) Sound and Wave-propagation in general, Intensity, Pitch and Quality of Musical Sounds, Harmonics, Concords, &c.

(*d*) Heat, its Nature, Effects, Measurement, Transference and Transformations—Measurement of Temperature and of absolute Temperature, Thermodynamics.

(*e*) Light (1), Geometrical Optics, Speed of Light, Laws of Reflection and Refraction, Construction and Effects of Mirrors, Prisms, Lenses, and Microscopes, Images, Conditions of Distinct Vision. (2) Physical Optics—Interference, Dispersion, Diffraction, Double Refraction, Polarisation, Spectrum Analysis.

(*f*) Electricity, including Frictional and Voltaic Electricity, Thermo- and Magneto-Electricity, Electro-Dynamics and Magnetism, with their practical applications. Measurements of Potential, Electromotive Force, Current, &c., Batteries, Dynamos, Electrometers, Galvanometers, Voltameters, &c.

HONOURS AT PROFESSIONAL EXAMINATIONS.

Candidates who have displayed special merit at any of the Professional Examinations will be announced as having passed that Examination "with distinction."

Candidates who have displayed special merit at each of the Professional Examinations will be announced, at the time of the Graduation, as having obtained First or Second Class Honours, according to the merit that has been displayed.

SPONSIO ACADEMICA FOR GRADUATES IN MEDICINE.

Ego Doctoratus in Arte Medica titulo jam donandus, sancte coram Deo cordium scrutatore, spondeo, me in omni grati animi officio erga Universitatem Academicam Edinburgensem ad extremum vitæ halitum perseveraturum.

Tum porro Artem Medicam caute, caste, probeque exercitaturum, et

quoad potero, omnia ad ægrotorum corporum salutem conducentia cum fide procuraturum. Quæ, denique, inter medendum visa vel audita sileri conveniat, non sine gravi causa vulgaturum.

Ita præsens spondenti adsit Numen.

FEES FOR EXAMINATIONS.

FEES FOR M.B. AND CH.B.

Fee for the First Division of the Examination, viz., Botany, Zoology, Physics, and Chemistry . .		£6 6 0
or		
For any two of the subjects . .	£3 3 0	
For the other two subjects . .	3 3 0	
For the Second Division, viz., Anatomy, Physiology, and Materia Medica and Therapeutics . . .		6 6 0
or		
For Anatomy and Physiology . .	£4 4 0	
For Materia Medica and Therapeutics	2 2 0	
For the Third Division, viz., Pathology, and Medical Jurisprudence and Public Health		4 4 0
For the Final Division, viz., Surgery and Clinical Surgery, Medicine and Clinical Medicine, and Midwifery		6 6 0
		£23 2 0

Any Candidate who fails to pass in one or more of the subjects, pays £1, 1s. for re-examination in each subject.

Candidates who, under the proviso in Section XI. of the Regulations, are exempted from the first division of the Examination, are required, after passing the final division of the Examination, to pay a fee of £6, 6s. before they can be admitted to the Degrees of M.B. and Ch.B.

Fee for M.D.	£10 10 0
Fee for Ch.M.	£10 10 0
Fee for D.Sc.	£10 10 0

Any Candidate who fails to pass the Examinations for the Degree of M.D. or for the Degree of Ch.M., or for the Degree of D.Sc., is required to pay a Fee of £5, 5s. for each re-appearance.

Every Candidate for Examination or Graduation must be a Matriculated Student of the year in which he appears for Examination or Graduation. He is also required to pay the fee of £1 for Registration as a Member of the General Council, if not already a Member.

N.B.—The above Fees include all charges for the Diplomas, and Graduates are requested to apply personally for their Diplomas at the Matriculation Office between 12 and 4 on the day of graduation. Any Graduate who cannot appear personally is required to give written authority to some person to receive and give a receipt for his Diploma.

TIME-TABLE OF EXAMINATIONS.

The dates of the Examinations for 1896-97 have been fixed as follows, and Candidates are required to assemble in the Examination Hall at the University a quarter of an hour before the time fixed for examination.

Preliminary Examination.

See Time-Table and Dates of Entering, &c., pages 613 and 614.

PROFESSIONAL EXAMINATIONS.

Candidates are required to enter their names and to pay the fees for the Examinations at the Matriculation Office, University (Old) Buildings, at the stated periods, and afterwards to exhibit their Certificates and Matriculation Cards at that Office. Certificates only will be received as evidence of attendance.

First Professional Examination.[1]

This Examination takes place in March and July. Candidates may be admitted to Examination in all or in any two subjects, after they have attended a full course in each of the subjects professed.

1897.

Mar.	9.	Tu.	Names to be given in, and Fees paid, *on or before* this date.
,,	19.	Fri.	Certificates to be examined.
,,	20.	Sat.	Practical Chemistry Examination begins at hours to be announced (also on subsequent days if necessary).
			Written Examinations.
,,	22.	Mon.	Chemistry at 10 o'clock; Botany at 1 o'clock.
,,	23.	Tu.	Zoology at 10 o'clock; Physics at 1 o'clock.
,,	24.	Wed.	Oral Examinations begin.
			July Examinations.
July	9.	Fri.	Names to be given in, and Fees paid *on or before* this date.
,,	16.	Fri.	Certificates to be examined.
,,	17.	Sat.	Practical Chemistry Examination begins at hours to be announced (also on subsequent days if necessary).
,,	19.	Mon.	Chemistry at 10 o'clock; Botany at 1 o'clock.
,,	20.	Tu.	Zoology at 10 o'clock; Physics at 1 o'clock.
,,	21.	Wed.	Oral Examinations begin.

[1] If names are not entered or Fees paid, or Certificates shown, on or before the stated dates, a late-entry fee of ten shillings must be paid before the Candidate can be admitted to Examination. A Candidate is not held to have entered for the Examination until his Name is entered, all the necessary Certificates, &c., lodged, and the Fee paid.

Second Professional Examination.[1]

This Examination takes place in March and July. Candidates who have passed the First Examination may be admitted to this Examination at the end of their Third Winter Session.

March Examinations.

Mar.	15.	Mon.	Names to be given in, and Fees paid *on or before* this date.
,,	24.	Wed.	Certificates to be examined.

Written Examinations.

,,	26.	Fri.	Anatomy at 10 o'clock ; Physiology at 1 o'clock.
,,	27.	Sat.	Materia Medica and Therapeutics at 10 o'clock. Oral Examinations begin.

Candidates may postpone their Examination in Materia Medica and Therapeutics until the close of the Summer Session following.

July Examinations.

July	15.	Thur.	Names to be given in, and Fees paid *on or before* this date.
,,	21.	Wed.	Certificates to be examined.

Written Examination.

July	23.	Fri.	Anatomy at 10 o'clock ; Physiology at 1 o'clock.
,,	24.	Sat.	Materia Medica and Therapeutics at 10 o'clock. Oral Examinations begin.

Third Professional Examination.[1]

This Examination takes place in March and July, and Candidates who have passed the Second Examination may be admitted to this Examination at the end of their Fourth Winter Session.

Mar.	25.	Thur.	Names to be given in, and Fees paid *on or before* this date.
,,	30.	Tu.	Certificates to be examined.

Written Examinations.

Apr.	2.	Fri.	Pathology at 10 o'clock ; Medical Jurisprudence and Public Health at 1 o'clock.
,,	3.	Sat.	Oral Examinations begin.

Candidates may postpone their Examination in Medical Jurisprudence and Public Health until the close of the Summer Session following.

1897.

Written Examination.

July	20.	Tu.	Names to be given in and Fees paid *on or before* this date.
,,	26.	Mon.	Certificates to be examined.
,,	27.	Tu.	Pathology at 10 o'clock. Medical Jurisprudence and Public Health at 1 o'clock.
,,	28.	Wed.	Oral Examinations begin.

[1] See footnote, page 620.

FOURTH OR FINAL PROFESSIONAL EXAMINATION.[1]

This Examination takes place in May and June, and may be taken when the Candidate has passed the Third Examination, and has completed his Fifth year of Medical Study.

April 13.	Tu.	Names to be given in and Fees paid *on or before* this date.
,, 14.	Wed.	Certificates to be examined.
,, 15.	Thur.	

Written Examinations.

May 4.	Tu.	Clinical Medicine Examinations begin.
June 21.	Mon.	Medicine at 10 o'clock.
,, 22.	Tu.	Surgery at 10 o'clock; Midwifery at 1 o'clock.
,, 23.	Wed.	Oral Examinations begin. Clinical Surgery Examination begins.

1897. DEGREE OF DOCTOR OF MEDICINE.[1]

April 30.	Fri.	Theses to be lodged, Certificates shown, and Fees paid *on or before* this date.

Examinations.

July 7.	Wed.	Names to be entered and Fees paid by Candidates for Clinical Examination only *on or before* this date.
,, 21.	Wed.	Clinical Medicine Examination begins.

1897. DEGREE OF MASTER OF SURGERY.[1]

April 30.	Fri.	Theses to be lodged, Certificates shown, and Fees paid *on or before* this date.

Examinations.

July 7.	Wed.	Names to be entered and Fees paid by Candidates for Clinical Examination only *on or before* this date.
,, 21.	Wed.	Surgical Anatomy. Operations on the dead body. Clinical Surgery Examinations begin.
,, 22.	Thur.	Names to be given in for Graduation, and the Registration Fee (if not previously registered) paid *on or before* this date.[1]
Aug. 2.	Mon.	GRADUATION CEREMONIAL at 10 A.M. Graduands to assemble at 8.45 A.M.

Information relative to Matriculation and the Curriculum of Study, and the Subjects of Examinations for Degrees in Medicine and Surgery, and for Fellowships, Scholarships, Bursaries, Prizes, &c., &c., may be obtained on application to the Dean of the Faculty of Medicine, University New Buildings.

The fees for Matriculation, for Examinations for Degrees, and for

[1] See footnote, page 620.

Registration as Member of the General Council of the University, are payable at the *Matriculation Office*, *University* (*Old*) *Buildings*. Candidates may pay the fees personally, or transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed "*Union Bank of Scotland* (*Hunter Square Branch*), *Edinburgh*," and not by cheques on private accounts. A Candidate is not held to be entered until his schedule is lodged, the fee paid, his certificates examined, and a pass to the Examination obtained.

EXTRA-ACADEMICAL TEACHERS.

REGULATIONS OF THE UNIVERSITY COURT RELATIVE TO CERTIFICATES OF ATTENDANCE.

The Certificate of Attendance granted to Students by recognised Extra-Academical Teachers, should, in all cases, state the number of Lectures, or of Meetings for Practical Instruction, in the Course; the number of occasions on which attendance was ascertained; and the number of those occasions on which the Student was present, and in what further respects he duly performed the work of the class. The Certificate should also state the general scope of the Course; and, in particular, in the case of *Chemistry*, that the Course included Organic as well as Inorganic Chemistry; in the case of *Midwifery*, that it included the Diseases of Women and Children; and, in the case of *Practical Materia Medica*, that it included Pharmacognosy, Pharmacy, Dispensing, and the writing of Prescriptions.

EXTRA-ACADEMICAL TEACHERS, WHOSE LECTURES QUALIFY FOR GRADUATION IN THIS UNIVERSITY.

		Date of Recognition.
ABERYSTWYTH.		
J. Ainsworth Davis, M.A.	Natural History,	28 July 1886.
D. Morgan Lewis	Physics,	16 July 1894.
J. H. Salter, B.Sc.	Botany,	30 Oct. 1893.
H. Lloyd Snape, D.Sc.	Chemistry & Practical Chemistry,	19 March 1888.
BANGOR.		
James J. Dobbie, D.Sc.,	Chemistry & Practical Chemistry,	30 May 1885.
Andrew Gray,	Physics,	26 Oct. 1892.
Reginald W. Phillips, M.A.,	Botany,	30 May 1885.
Philip J. White, M.B.,	Natural History,	9 Dec. 1889.
BELFAST.		
R. O. Cunningham, M.D.,	Zoology,	18 Feb. 1895.

BIRMINGHAM.

		Date of Recognition.
F. J. Allen, M.A.,	Physiology & Practical Physiology,	12 Dec. 1887.
T. W. Bridge, M.A.,	Zoology,	9 July 1883.
Percy F. Frankland,	Chemistry & Practical Chemistry,	16 July 1894.
W. Hillhouse, M.A.,	Botany,	26 Nov. 1883.
J. H. Poynting, D.Sc.,	Physics,	12 June 1893.
Bertram C. A. Windle, M.D.,	Anatomy,	17 Nov. 1884. 29 Oct. 1888.

BRISTOL.

G. Munro Smith, L.R.C.P., M.R.C.S.	Physiology & Practical Physiology,	29 Oct. 1888.

(*Certificates for two consecutive Lecture Courses required.*)

CARDIFF.

John Berry Haycraft, M.D.,	Physiology,	16 July 1894.
A. W. Hughes, M.B.,	Anatomy,	16 July 1894.
J. V. Jones, M.A., B.Sc.,	Physics,	16 July 1894.
W. N. Parker, Ph.D.,	Natural History,	28 July 1886.
Professor Selby,	Physics,	
Claud M. Thompson, M.A., D.Sc.,	Chemistry & Practical Chemistry,	28 July 1886.

(*Lecture Course may be divided between two consecutive Sessions.*)

A. H. Trow, B.Sc.,	Botany,	16 July 1894.

CORK.

J. J. Charles, M.D., D.Sc.,	Physiology,	18 Feb. 1895.

(*Qualifying Course to embrace "Ordinary Course" and Course for Senior Students.*)

Marcus Hartog, M.D., D.Sc.,	Zoology,	18 Mar. 1895.

DUBLIN.

A. C. Haddon, M.A.,	Natural History,	23 Jan. 1888.
Chs. R. C. Tichborne, Ph.D.,	Practical Chemistry,	28 Feb. 1881.

EDINBURGH.

A. P. Aitken, D.Sc.,	Chemistry & Practical Chemistry,	29 Oct. 1888.
J. O. Affleck, M.D.,	Practice of Physic,	8 Dec. 1879.
Byrom Bramwell, M.D.,	Practice of Physic,	18 Oct. 1880.
J. Macdonald Brown, M.B.,	Anatomy & Practical Anatomy,	18 July 1884.
Alexander Bruce, M.D.,	Pathology & Practical Pathology,	24 January 1887.
A. G. Bruce,	Practical Materia Medica,	18 June 1894.

EDINBURGH—*continued.*		*Date of Recognition.*
Francis M. Caird, M.B., C.M.,	Surgery,	13 August 1886.
Wm. Craig, M.D.,	Materia Medica & Prac. Materia Med.	14 July 1879.
T. W. Drinkwater, Ph.D.	Chemistry and	8 March 1880.
	Practical Chemistry,	14 July 1879.
John Duncan, M.D.,	Clinical Surgery,	28 July 1886.
William Duncan,	Prac. Materia Med.,	12 April 1886.
E. S. Fry, M.B.,	Practical Materia Medica,	Oct. 1895.
George A. Gibson, M.D.,	Practice of Physic,	9 Dec. 1889.
David Berry Hart, M.D.,	Midwifery,	22 Oct. 1894.
F. W. N. Haultain, M.D., F.R.C.P.E.,	Midwifery,	15 June 1891.
J. W. B. Hodsdon, M.D.,	Surgery,	3 August 1888.
John Hunter, F.I.C., &c.,	Chemistry & Practical Chemistry,	22 Oct. 1894.
Alex. James, M.D.,	Practice of Physic,	3 August 1888.
Alexander Johnstone,	Botany,	26 Oct. 1892.
J. Falconer King, F.C.S.,	Chemistry & Practical Chemistry,	12 Nov. 1894.
R. F. C. Leith, M.B., B.Sc.,	Pathology,	26 Oct. 1892.
	Prac. Pathology,	13 June 1892.
H. D. Littlejohn, M.D.,	Med. Jurisprudence,	before 1861.
Stevenson Macadam, Ph.D.,	Chemistry & Practical Chemistry,	before 1861.
W. Ivison Macadam, F.R.S.E.	Chemistry & Practical Chemistry,	23 July 1888.
A. N. M'Alpine, B.Sc.,	Botany,	8 March 1880.
Chas. W. MacGillivray, M.D., and P. H. M'Laren, M.B.,	Clinical Surgery,	14 Nov. 1892.
George Mackay, M.D.,	Ophthalmology,	13 July 1896.
J. S. M'Laren, M.B.,	Surgery,	26 Oct. 1892.
Alexander Miles, M.D.,	Anatomy and Practical Anatomy,	12 Feb. 1894.
Alexander G. Miller, M.D.,	Clinical Surgery,	3 August 1888.
R. Milne Murray, M.B.,	Midwifery,	13 August 1886.
James Musgrove, M.D.,	Anatomy,	16 July 1894.
D. Nöel Paton, M.D.,	Physiology and	24 Oct. 1887.
	Prac. Physiology,	19 March 1888.
R. W. Philip, M.D.,	Medicine,	16 July 1894.
J. B. Readman, D.Sc.,	Practical Chemistry,	17 Dec. 1888.
William Russell, M.D.,	Pathology & Practical Pathology,	6 August 1887.
Ralph Stockman, M.D.,	Materia Medica & Prac. Materia Med.,	9 Dec. 1889.

EDINBURGH—*continued.*		*Date of Recognition.*
Alexis Thomson, M.D.,	Surgery,	30 Oct. 1893.
J. Arthur Thomson, M.A.,	Natural History,	28 July 1886.
J. Batty Tuke, M.D., Edinr., and John Macpherson, M.D., Larbert	Mental Diseases,	13 July 1896.
R. Turnbull, B.Sc.,	Botany,	18 Feb. 1895.
Dawson F. D. Turner, M.D.,	Physics,	20 March 1893.
J. R. Whitaker, M.B.,	Anatomy,	16 July 1894.
William Wood, M.B.,	Prac. Materia Med.,	15 June 1893.
John Wyllie, M.D.,	Practice of Physic,	20 Dec. 1878.
	GLASGOW.	
John Barlow, M.D.,	Physiology,	26 Nov. 1883.
	Prac. Physiology,	8 January 1890.
D. Campbell Black,	Physiology,	15 July 1895.
A. M. Buchanan, M.D.,	Anatomy and Practical Anatomy,	12 Oct. 1874.
R. M. Buchanan, M.D.,	Medical Jurisprudence,	13 July 1896.
H. E. Clark, M.D.,	Surgery,	12 Feb. 1894.
James Dunlop, M.D.,	Surgery,	12 Oct. 1874.
Samson Gemmell, M.D.,	Practice of Physic,	18 July 1881.
R. T. Kent, F.R.C.S.,	Practical Anatomy,	18 Dec. 1893.
R. Barclay Ness,	Materia Medica & Prac. Materia Med.	16 Dec. 1895.
Alex. Robertson, M.D.,	Practice of Physic,	15 June 1891.
John Lindsay Steven, M.D.,	Pathology & Practical Pathology,	10 April 1893.
	LONDON.	
G. B. Howes,	Natural History,	18 July 1887.
	NOTTINGHAM.	
J. W. Carr, M.A.,	Botany,	16 Jan. 1893.
Frank Clowes, D.Sc.,	Chemistry & Practical Chemistry,	9 Dec. 1889.
	SHEFFIELD.	
W. Carlton Williams, B.Sc.,	Chemistry & Practical Chemistry,	26 Nov. 1883.

B.—REGULATIONS FOR GRADUATION IN MEDICINE AND SURGERY, APPLICABLE TO ALL WHO COMMENCED THEIR MEDICAL STUDIES BEFORE 1ST OCTOBER 1892.

Three Degrees in Medicine and Surgery are conferred by the University of Edinburgh—viz., Bachelor of Medicine (M.B.),

Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The Degree of Master in Surgery is not conferred on any person who does not at the same time obtain the Degree of Bachelor of Medicine.

These Degrees admit to the General Council of the University, and to the Medical Register. They qualify for Practice throughout Her Majesty's dominions, and for admission to the Military, Naval, and other Public Medical Services in the United Kingdom.

All Candidates must give evidence of having obtained a satisfactory General Education.

PRELIMINARY EXAMINATION.[1]

See Time-Table of Examinations, Dates for Entering and Payment of Fees, &c., pp. 613 *and* 614.

I. The preliminary branches of extra-professional education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and the proficiency of Students in these branches is ascertained by examination, prior to the commencement of their medical study.

II. No Candidate is admitted to a professional examination who has not passed a satisfactory examination on at least two of the following subjects (in addition to the subjects mentioned above):—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy; and the examination on these latter subjects also takes place before the candidate has entered on his Medical Curriculum.

III. A Degree in Arts (not being an Honorary Degree) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University, specially recognised for this purpose by the University Court, exempts from all preliminary examination; and an Examination in Arts by any corporate body, whose examination has been recognised as qualifying for entrance on medical study by resolution of the General Medical Council of the United Kingdom, provided the said examination by the said corporate body shall be also approved by the University Court, shall exempt, *pro tanto*, from preliminary examination in Arts, on the subjects comprised in the said examination of the said corporate body.[1]

Optional Preliminary Subjects of Examination under the Old Regulations for Bachelors of Medicine who intend to proceed to the Degree

[1] The Dean of the Faculty will give information regarding examinations which exempt from the Preliminary Examination; and see CALENDAR for 1892-93, and previous Calendars, for examinations which exempt.

of Doctor of Medicine, and for those who commenced the Study of Medicine by attendance on Medical Classes before 1st October 1892, *from Autumn* 1896 *to Spring* 1898 *inclusively.*

Each Candidate is required to pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

1. GREEK.—Xenophon, *Cyropædia*, Book VII. Some easy sentences of English will be set to be translated into Greek.

2. FRENCH.—Alphonse Daudet's *Le petit Chose, première partie* (Hachette & Co.). An easy passage in English will be given for translation into French.

3. GERMAN.—Homann, *Deutsche Märchen*, Nos. 8-14. An easy passage in English will be given for translation into German.

4. HIGHER MATHEMATICS.—Same as Higher Mathematics for the Preliminary Examination for the Degree in Arts.

5. NATURAL PHILOSOPHY.—(1.) Properties of matter—Elasticity, Density, Porosity, Capillarity, &c. (2.) Elementary phenomena of Sound, Light, Heat, Electricity, and Magnetism. Text-Books recommended—Balfour Stewart's *Elementary Physics*, and Tait's *Properties of Matter*.

6. LOGIC.—*Either* (*a*) The Elements of Deductive and Inductive Logic, as in Fowler or Jevons; *or* (*b*) Professor Campbell Fraser's *Selections from Berkeley*, Editor's "Historical Introduction," Author's *Principles of Human Knowledge*, and *Divine Visual Language: A Dialogue.*

7. MORAL PHILOSOPHY.—Professor Calderwood's *Handbook of Moral Philosophy.*

PROFESSIONAL EDUCATION.

IV. No one is admitted to the DEGREES of BACHELOR of MEDICINE and MASTER in SURGERY who has not been engaged in Medical and Surgical study for four years—the Medical Session of each year, or *Annus Medicus*, being constituted by at least two Courses of not less than one hundred lectures each, or by one such Course, and two Courses of not less than fifty lectures each; with the exception of the Clinical Courses, in which lectures are to be given at least twice a week during the prescribed periods.

V. Every Candidate for the Degrees of M.B. and C.M. must give sufficient evidence by certificates—[1]

1. That he has studied each of the following departments of Medical Science, viz.,

[1] No Course of Lectures will be allowed to qualify unless the Lecturer certifies that it has embraced at least 100 lectures or 50 lectures, in conformity with the requirements of this section. Three Months' courses on Materia Medica, Pathology, and Midwifery do not qualify.

Anatomy, ...	During Courses including not less than One Hundred Lectures.
Chemistry, ...	
Materia Medica, ...	
Institutes of Medicine or Physiology,	
Practice of Medicine, . . .	
Surgery, ...	
Midwifery, and the Diseases peculiar to Women and Children; two Courses of Midwifery, of Three Months each, being reckoned equivalent to a Six Months' Course, provided different departments of Obstetric Medicine be taught in each of the Courses, . .	
General Pathology, or in Schools where there is no such Course, a Three Months' Course of Lectures on Morbid Anatomy, together with a Supplemental Course of Practice of Medicine or Clinical Medicine,	
Practical Anatomy, .	A Course of the same duration as those of not less than One Hundred Lectures above prescribed.[1]
Practical Chemistry, .	Three Months.
Clinical Medicine, .	Courses of the same duration, as those of not less than One Hundred Lectures above prescribed, or Two Courses of Three Months, Lectures being given at least twice a week.
Clinical Surgery, .	
Medical Jurisprudence, . .	During Courses including not less than Fifty Lectures.
Botany, ...	
Natural History, including Zoology,	

2. That he has attended for at least two years the Medical and Surgical Practice of a General Hospital which accommodates not fewer than eighty patients, and possesses a distinct staff of Physicians and Surgeons.

3. That he has attended during a Course of not less than fifty hours' instruction the Class of Practical Materia Medica and Pharmacy in the University of Edinburgh, or a similar class conducted in a University or recognised School of Medicine, or a similar Class conducted at the Laboratory of an Hospital or Dispensary, or elsewhere, by a Teacher recognised by the University Court under Section VI. Sub-section 4;

[1] Certificates of attendance on Practical Anatomy must express not only the number of months engaged in dissection, but the names of the parts dissected, and the degree of care with which the dissections have been made. Students are recommended not to appear for examination in Anatomy, with a view to a Degree, until they have dissected the human body at least once.

or, that he has been engaged by apprenticeship,[1] for not less than two years, with a Registered Medical Practitioner, or a Member of the Pharmaceutical Society of Great Britain, or a Member of the Pharmaceutical Society of Ireland, or a Pharmaceutical Chemist, or Chemist and Druggist, registered under the provisions of the "Act for regulating the qualifications of Pharmaceutical Chemists, 1852," "The Pharmacy Act, 1868," or "The Pharmacy Act (Ireland), 1875," in the *bona fide* compounding and dispensing of Drugs, and the preparation of their officinal and other Preparations under his superintendence.

4. That he has attended, for at least six months, by apprenticeship or otherwise, the *out-practice* of an Hospital, or the practice of a Dispensary, Physician, Surgeon, or Member of the London or Dublin Society of Apothecaries.

5. That he has attended at least twelve cases of labour under the superintendence of a registered Medical Practitioner; or that he has attended six such cases, and also has attended for at least three months the practice of a Midwifery Hospital in which practical instruction is regularly given.

6. That he has attended, during courses of not less than fifty hours' instruction, Classes of Practical Physiology and Practical Pathology in the University of Edinburgh, or in a University or School of Medicine recognised by Sub-sections 2 and 4 of Section VI. of Ordinance No. 8, Edinburgh No. 3, or upon Classes thereof, conducted by a Teacher recognised by the University Court under the said Sub-section 4.

VI. The studies of Candidates for the Degrees of Bachelor of Medicine and Master in Surgery are subject to the following Regulations :—

1. One of the four years of Medical and Surgical study, required by Section IV., must be in the University of Edinburgh.

2. Another of such four years of Medical and Surgical study must be either in the University of Edinburgh, or in some other University entitled to give the Degree of Doctor of Medicine.

3. Attendance during at least six winter months on the Medical or Surgical Practice of a General Hospital, which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy, may be reckoned as one of such four years, and to that extent shall be held equivalent to one year's attendance on Courses of Lectures as above prescribed.

4. One year's attendance on the Lectures of Teachers of Medicine in the Hospital Schools of London (including the Professors in the Faculty of Science, in subjects required for graduation, in King's College and University College, London), or in the School of the College of Surgeons in Dublin, or of such Teachers of Medicine in Edinburgh, or

[1] Apprenticeship, Dispensary or Hospital Practice, Practical Midwifery, and Vaccination, &c., are not reckoned as *Classes* in making up an *Annus Medicus*.

elsewhere, as may from time to time be recognised by the University Court, may be reckoned as one of such four years, and to that extent shall be held as attendance on Courses of Lectures as above prescribed.

5. Candidates may, to the extent of Four of the Departments of Medical Study required by Section V., Sub-section 1, attend in such year or years of their Medical and Surgical studies, as may be most convenient to them, the Lectures of the Teachers of Medicine specified in the foregoing Sub-section 4.

[Thus, Students of Medicine in the London Schools and in the School of the College of Surgeons in Dublin can obtain there two *Anni Medici* out of the four required for the Edinburgh Degrees in Medicine. Courses of Lectures in these Schools, and the Courses of the Medical Teachers and of the Science Teachers in King's College and in University College, London, in the Subjects of Graduation, are regarded as equivalent to Lectures on the corresponding subjects in this University, except Materia Medica and Midwifery, which, when only three months' Courses, are not received as equivalent. One *Annus Medicus* may be constituted by attendance on Practical Anatomy and Hospital Practice during the Winter Session. Another *Annus Medicus* by attending either (*a*) full Winter Courses on any two of the following subjects: Anatomy, Physiology, Chemistry, Pathology, Surgery, Medicine, Clinical Surgery, Clinical Medicine; or (*b*) on one such Course and two three months' Courses on any of the following subjects: Botany, Practical Chemistry, Natural History, Medical Jurisprudence. If the Student selects the arrangement prescribed in (*a*), attendance on a third Course, although unnecessary to constitute an *Annus*, will also be accepted. The other subjects, and the additional Courses, not given in London or Dublin, necessary for the degrees of the University, require to be attended at this University.

In Provincial Schools, where there are no Lecturers recognised by the University Court, a Candidate can have only One *Annus Medicus*, and this is constituted by attendance on a Qualified Hospital along with a course of Practical Anatomy, but in a Provincial School where there are two or more Lecturers recognised by this University, a Second *Annus Medicus* may be made by attendance on at least two six months', or one six months' and two three months', recognised Courses.

6. All Candidates not Students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names in a book to be kept by the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

7. The Fee for attendance on the Lectures of an Extra-Academical Teacher in Edinburgh, with a view to Graduation, must be of the same amount as that exigible by Medical Professors in the University.

[*The Fee must be paid at the commencement of the Course, and Certificate must state the amount of the fee paid.*]

8. No Teacher is recognised who is at the same time a Teacher of more than one of the prescribed branches of study, except in those cases where Professors in the University are at liberty to teach two branches.

9. It is not necessary for any Teacher, attendance on whose Lectures was recognised before 1861 for the purposes of Graduation in the University, to obtain a new recognition from the University Court; and attendance on the Lectures of every such Teacher will continue to be recognised as heretofore.

10. It is in the power of the University Court, if they shall see cause, at any time to withdraw or suspend the recognition of any Teacher or Teachers.

VII. Every Candidate must deliver, before the 31st day of March of the year in which he proposes to Graduate, to the Dean of the Faculty of Medicine—

1. A declaration, in his own handwriting, that he has completed his twenty-first year, [or that he will have completed it on or before the day of Graduation,] and that he will not be, on the day of Graduation, under articles of apprenticeship to any Surgeon or other master. (This declaration, along with a statement of studies, is appended to the Schedule for the Final Examination, and must be attested and signed before the Schedule is given in.)

2. A statement of his studies, as well in Literature and Philosophy as in Medicine, accompanied with proper certificates.

PROFESSIONAL EXAMINATIONS.

VIII. Each Candidate is examined, both in writing and *viva voce*—*Firstly*, on Chemistry, Botany, and Natural History; *Secondly*, on Anatomy, Institutes of Medicine, Materia Medica [including Practical Pharmacy and Prescribing], and Pathology; *Thirdly*, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; *Fourthly*, Clinically on Medicine and on Surgery in an Hospital. The examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, Natural History, Materia Medica and Pathology are conducted, as far as possible, by demonstrations of objects placed before the candidates.

IX. Students who profess themselves ready to submit to an

examination in the first division of these subjects may be admitted to examination therein at the first period of examination after they have completed their attendance on the necessary classes: provided always that it shall be lawful for students to proceed to examination in the said subjects under one or more of the following sub-divisions, namely—(*a*) Botany and Natural History, (*b*) Chemistry (including Practical Chemistry), (*c*) Botany and Chemistry (including Practical Chemistry), or (*d*) Natural History and Chemistry (including Practical Chemistry), at the first period of examination after they have completed attendance on the relative classes: and to proceed to examination in the remaining subject or subjects at a subsequent period of examination.

X. Students who have passed their examination on the first division of these subjects, may be admitted to examination on the second division at the end of their third year.

XI. The examination on the third and fourth divisions cannot take place until the candidate has completed his fourth *Annus Medicus.*

XII. Candidates may, if they choose, be admitted to examination on the first two of these divisions at the end of their third year, or to the four examinations at the end of their fourth year.

[Thus, Candidates for the First Professional Examination, after they have completed attendance on the necessary Classes, may appear for Examination in all the subjects, or they may appear for Examination in one or more of the separate sub-divisions mentioned in Section IX.; for the Second Professional Examination attendance for three complete *Anni Medici* is required; and for the Final Professional Examination, four complete *Anni Medici* are required. Qualifying courses must have been attended on all the subjects of each division or sub-division of Examination previously to the Candidate being admitted to examination in that division.]

XIII. If any Candidate at these examinations be found unqualified, he cannot be again admitted to examination unless he has studied, during another year, two of the prescribed subjects,[1] either in the University, or in some other School of Medicine.

[1] Satisfactory Certificates must be produced as evidence of such study.

DEGREE OF DOCTOR OF MEDICINE.

XVII. The Degree of DOCTOR OF MEDICINE may be conferred on any candidate who has obtained the Degrees of Bachelor of Medicine and Master in Surgery, and is of the age of twenty-four years, and produced a certificate of having been engaged subsequently to his having received the Degrees of Bachelor of Medicine and Master in Surgery, for at least two years in attendance on an Hospital, or in the Military or Naval Medical Services, or in Medical and Surgical Practice:

Provided always that the Degree of Doctor of Medicine shall not be conferred on any person, unless he be a Graduate in Arts of one of the Universities of England, Scotland, or Ireland, or of such other Universities as are above specified [Section III.], or unless he shall, before or at the time of his obtaining the Degrees of Bachelor of Medicine and Master in Surgery, or thereafter, have passed a satisfactory examination on *three* of the subjects mentioned in Section II. of the Statutes relative to Preliminary Examination. Two of these must be Greek, and either Logic or Moral Philosophy, and the third must be one of the following subjects at the option of the Candidate—namely, French, German, Higher Mathematics, and Natural Philosophy.

And provided also that the candidate for the Degree of Doctor of Medicine shall submit to the Faculty of Medicine a Thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the Degrees of Bachelor of Medicine and Master in Surgery, which he may have made a subject of study after having received those Degrees. The Candidate must lodge his Thesis with the Dean on or before 30th April of the year in which he proposes to graduate. No Thesis will be approved by the Medical Faculty which does not contain either the results of original observations in practical Medicine, Surgery, Midwifery, or in some of the sciences embraced in the curriculum for the Bachelor's and Master's Degrees; or else a full digest and critical exposition of the opinions and researches of others on the subject selected by the Candidate, accompanied by precise references to the publications quoted, so that due verification may be facilitated.[1]

Candidates, settled for a period of years in foreign parts, who

[1] Candidates are required to write their Theses on faint lined paper, 11 in. by 8½ in. with margins 1½ in. at each side. The Thesis is to be written on one side of each leaf only.

have complied with all the regulations for the Degree of M.D., but who cannot appear personally to receive the Degree, may, on satisfying the Senatus to that effect, by production of sufficient official testimonials, have the Degree conferred on them in absence.

The Regulations regarding Matriculation, Attendance on the necessary Classes, Class Examinations, Vaccination, &c., are the same as under the New Regulations.

FEES FOR DEGREES, &c. (OLD REGULATIONS).

Examination in Botany, Chemistry, Chemical Testing, Natural History, ...	£5	5	0
Examination in Anatomy, Institutes of Medicine, Materia Medica, Prescriptions, Pathology, ...	5	5	0
Final Examination in Surgery, Midwifery, Practice of Physic, Medical Jurisprudence, Clinical Medicine (with Prescriptions), Clinical Surgery, during last Summer Session, ...	10	10	0
Total Fees for M.B. and C.M. Diplomas, .	£21	0	0
Additional Fee for M.D. Diploma, ...	£5	5	0
Matriculation Fee, ...	1	1	0
Fee for Registration as a Member of the University General Council, if not already a Member, . .	1	0	0

In the event of the Candidate failing to pass any one of the Professional Examinations, the Fee is not returned ; but he may appear at one subsequent examination without paying an extra Fee, and at any future examination on paying a Fee of £2, 12s. 6d.

TIME-TABLE OF EXAMINATIONS,[1] &c.

Preliminary Examination.

See Time-Table of Examinations, Dates of Entering, &c., pages 613 and 614.

The dates of the Examinations for 1896-97 have been fixed as follows, and Candidates are required to assemble in the Examination Hall at the University a quarter of an hour before the time fixed for examination.

PROFESSIONAL EXAMINATIONS UNDER OLD REGULATIONS.

Candidates are required to present their Certificates for Examinations at the Office of the Faculty of Medicine, University New Buildings, and to pay the fees at the Matriculation Office.

[1] See footnote, page 620.

Candidates lodging statements of their Courses of Study with the Dean of the Faculty, will observe that for all Courses and Subjects of Study the Faculty will receive Certificates only as evidence of attendance.

First Professional Examination.[1]

1897.

Mar.	9.	Tues.	Names to be given in, and Fees paid *on or before* this date.[1]
,,	19.	Fri.	Certificates to be examined.
,,	20.	Sat.	Practical Chemistry begins at hours to be announced. (Also on subsequent days if necessary).
			Written Examination.
,,	22.	Mon.	Chemistry, 10; Botany, 1.
,,	23.	Tues.	Zoology, 10.
,,	24.	Wed.	Oral Examinations begin.
July	9.	Fri.	Names to be given in, and Fees paid *on or before* this date.
,,	16.	Fri.	Certificates to be examined.
,,	17.	Sat.	Practical Chemistry begins at hours to be announced. (Also on subsequent days if necessary).
			Written Examination.
,,	19.	Mon.	Chemistry, 10; Botany, 1.
,,	20.	Tues.	Zoology, 10.
,,	21.	Wed.	Oral Examinations begin.

Second Professional Examination.[1]

Mar.	15.	Mon.	Names to be given in, and Fees paid *on or before* this date.
,,	24.	Wed.	Certificates to be examined.
,,	26.	Fri.	Anatomy, 10; Physiology, 1.
,,	27.	Sat.	Materia Medica, 10. Oral Examinations begin.
April	2.	Fri.	Pathology, 10.
,,	3.	Sat.	Oral Examination begins.
July	15.	Thur.	Names to be given in, Certificates shown, and Fees paid for the Examination in July *on or before* this date.
,,	21.	Wed.	Certificates to be examined.
,,	23.	Fri.	Anatomy, 10; Physiology, 1.
,,	24.	Sat.	Materia Medica, 10; Oral Examinations begin.
,,	27.	Tues.	Pathology, 10.
,,	28.	Wed.	Oral Examination begins.

[1] See footnote, page 620.

FINAL PROFESSIONAL EXAMINATION.[1]

1897.			
April	13.	Tues.	Names to be given in, and Fees paid *on or before* this date.
,,	14.	Wed.	Certificates to be examined.
,,	15.	Thur.	
May	4.	Tu.	Clinical Medicine Examinations begin.
June	21.	Mon.	Medicine, 10; Medical Jurisprudence, 1.
,,	22.	Tues.	Surgery, 10; Midwifery, 1.
,,	23.	Wed.	Oral Examinations begin. Clinical Surgery Examinations begin.

DEGREE OF M.D.[1]

April	30.	Fri.	Theses to be given in, Certificates shown, and Fees paid *on or before* this date.
July	20.	Mon.	Names to be given in for Graduation and Registration Fee (if not previously registered) paid *on or before* this date.
Aug.	2.	Mon.	GRADUATION CEREMONIAL at 10 A.M. Graduands are required to assemble at 8.45 A.M.

DOCTORS OF MEDICINE

WHO HAVE BEEN AWARDED GOLD MEDALS FOR THEIR THESES FROM 1889 TO 1895 INCLUSIVELY.[2]

1889.

Herbert H. Ashdown, England
John W. Ballantyne, Scotland
Arthur J. M'D. Bentley, England
Kenneth M. Douglas, Scotland
Thomas A. Helme, England
Henry Alexis Thomson, Scotland
Joseph Tillie, Scotland
Herbert F. Waterhouse, England

1890.

Joseph Griffiths, Wales
Robert Muir, Scotland
George Edmund Pierez, Ceylon
W. G. A. Robertson, Scotland
Arthur Robinson, England
John David Williams, Wales

1891.

Edmund W. W. Carlier, England
Vaughan Berkeley Harley, England
David Hepburn, Scotland
Alexander Miles, Scotland
James Ritchie, Scotland
George Neil Stewart, Scotland
John Clarence Webster, Canada

1892.

George Sandison Brock, Scotland
Alex. Lockhart Gillespie, Scotland
William Aldren Turner, Scotland
Arthur John Whiting, England
Theodore Stacey Wilson, England

1893.

Francis Darby Boyd, Scotland

[1] See footnote, page 620.

[2] The names of those who received Gold Medals prior to 1859 will be found in the List of Graduates in Medicine of the University of Edinburgh since its foundation, published in 1867, and the names of those who received Gold Medals from 1859 to 1888, both years included, will be found in the Historical Appendix to List of Graduates, published in 1889, pp. 128, 129.

James Samuel Risien Russell, Demerara
James Lorrain Smith, Scotland
John Cleasby Taylor, England
William Ernest Francis Thomson, Scotland

1894.

Lewis Campbell Bruce, Scotland
William Menzies Hutton, Scotland
Gustav Mann, India
James Acworth Menzies, Scotland
John Douglas Stanley, Ireland

1895.

Frank Leigh Ehrke, England
Wilfred Vincent Miller Koch, Ceylon
James Ritchie, Scotland
Andrew Walker, Scotland

DOCTORS OF MEDICINE, WITH THE TITLES OF THEIR THESES, WHO GRADUATED ON 1ST AUGUST 1895.

*** *Obtained Gold Medals for their Dissertations.*

** *Deemed worthy of competing for Gold Medals.*

* *Commended for their Dissertations.*

** John Ailison, Scotland, M.B., C.M., 1886. Pernicious Anæmia.

* James Shirras Anderson, Scotland (M.A.), M.B., C.M., 1892. A Case of Dermatitis Herpetiformis Multiformis, with several references to its etiology.

David Anderson-Berry, Scotland, M.B., C.M., 1884. Enteric Fever: a slight Sketch introductory to the relation of two cases exhibiting some peculiar features of this disease.

Arthur Richard Barnes, England, M.B., 1876. Ringworm and its Treatment.

5 John Hargreaves Battersby, England, M.B., C.M., 1888. Retinitis Pigmentosa, with notes on twenty-one cases.

Charles Hubert Bond, England, M.B., C.M., 1892. A Study of the Calvaria of those Dying Insane, with special reference to their Histology and Chemistry.

** George Clark Cameron, Scotland, M.B., C.M., 1888. On Rheumatism.

Edward John Walter Carruthers, Scotland, M.B., C.M., 1891. The Treatment of Hip-Joint Disease in Children by Excision.

James Simpson Clayton, England, M.B., C.M., 1882. Some Clinical Considerations on the Actions of Ipecacuanha and other Emetics.

10 Francis Gillies Connor, Australia, M.B., C.M., 1883. The Disorders of Dentition.

William Thomas Crawford, Scotland (M.A.), M.B., C.M., 1889. An Inquiry into the Water Supply of a Rural District, and its probable bearing on the Health of the Population.

* Rhys Davies, Wales, M.B., C.M., 1889. The Mineral Waters of Mid-Wales.

Arthur Dennison, England, M.B, C.M., 1893.

Measles based on experience of sixty cases seen in October, November, and December 1894, in Leeds.

* George Dickson, Scotland, M.B., C.M., 1892. Spasmus Nutans, or the Nodding Spasm.

15** Charles James Whitehead Dixon, England, M.B., C.M. (with First-Class Honours), 1890. The Treatment of Pulmonary Consumption, with an Analysis of Cases and Statistics relating to many important Symptoms and Complications, as well as other Points of Interest in connection with the Disease.

David Somerville Doughty, Scotland, M.B., C.M., 1886. Herpes Zoster.

* David Robert Dow, Scotland (M.A.), M.B., C.M., 1884. A Study of Progressive Muscular Atrophy, with special reference to the Idiopathic Form, and Clinical Notes of two Cases of the latter variety.

** James Crauford Dunlop, Scotland, M.B., C.M., 1886. On the Excretion of Oxalic Acid in Urine.

*** Frank Leigh Ehrke, England, M.B., C.M., 1892. Diphtheria, and its Treatment with Antitoxin.

20 David Fairweather, Scotland (M.A.), M.B., C.M., 1879. The History and Medical and Surgical Treatment of a Case of Actinomycosis commencing in the Appendix Vermiformis.

Ebenezer Forsyth, Scotland, M.B., C.M., 1889. Medico-Legal Studies.

* Richard Julyan George, England, M.B., C.M., 1888. Typhoid Fever: Notes on an Epidemic that occurred in and around Port-Isaac, Cornwall, during 1893 and 1894.

* Alexander Bruce Giles, Scotland, M.B., C.M., 1890. Erysipelas: its Symptoms, Pathology, and Treatment: a Historical Study.

* Howard Beauchamp Gladstone, England, M.B., C.M., 1893. Leucocythæmia: its Symptoms, Pathology, and Treatment.

25 Henry Laing Gordon, England, M.B., C.M., 1889. The Treatment of Pulmonary Phthisis by residence in the Karroo, Cape Colony.

* James Taylor Grant, Scotland, M.B., C.M., 1893. Acquired Immunity, and its Application to Serum Therapeutics.

Vincent Green, England, M.B., C.M., 1892. The Sequel to a Case of Lumbar Colotomy, with Remarks thereon.

* William Clayton Grosvenor, England (M.A.), M.B., C.M., 1891. Clubbed Fingers: their Relation to Pulmonary Tuberculosis.

John Stonely Hill, England, M.B., C.M., 1883. Pleurisy.

30** George Home, New Zealand, M.B., C.M. (with First-Class Honours), 1892.

The Innervation of the Ovary: a Histological Study.

William Edward Home, Ireland (B.Sc.), M.B., C.M., 1885. Malta Fever: its Etiology and Prevention.

** Robert Main Horne, Scotland, M.B., C.M. (with First-Class Honours), 1890. Muscle Plasma and its Coagulation.

Thomas Edward Hughes, England, M.B., C.M., 1890. Puerperal Fever.

George Bernard Jameson, England, M.B., C.M., 1890. Ophthalmia Neonatorum.

35** Sir Bhagvat Sinhji Jareja, India, M.B., C.M., 1892. History of Aryan Medical Science.

** George Francis Johnston, New Brunswick, M.B., C.M., 1885. Paralysis Agitans.

* William Watkins Jones, Wales, M.B., C.M., 1888. Bacteriology and Sero-Therapy of Diphtheria.

William Henry Edward Knaggs, Cape of Good Hope, M.B., C.M., 1886. Malarial Fever.

*** Wilfrid Vincent Miller Koch, Ceylon, M.B., C.M., 1884. Leprosy in Trinidad: a Study.

40 James Rudolph Paul Lambert, England, M.B., C.M., 1890. On Intra-Thoracic Aneurism, with some Observations on the use of Sphygmograph.

Frederick Lishman, England, M.B., C.M., 1893. Clinical and Pathological Observations on cases of Intercellular Lung Disease in the Insane: with Remarks on the Insanity of Phthisis.

* Frederick William Lyle, Scotland, M.B., C.M., 1889. Multiple Neuritis.

** Charles John Macalister, England, M.B., C.M., 1884. Empyema and Allied Thoracic Effusions considered Historically, Clinically, Experimentally, and Practically.

* James Macdonald, Scotland (M.A.), M.B., C.M., 1881. A Narrative of Diphtheria Occurrence in a provincial town, with an Analysis of fifty-two cases of the disease, and Notes of a few cases treated by the Serum Method.

45** Frederick William Mackay, England, M.B., C.M., 1892. Diphtheria, with special reference to the treatment with its Antitoxin.

* Robert MacLelland, Scotland, M.B., C.M., 1885. History of a case of supposed Idiopathic Pernicious Anæmia, with Remarks.

Herbert William George Macleod, India, M.B., C.M., 1886. On Adenoid Vegetations of the Naso-Pharynx.

* George William Falconer Macnaughton, Scotland, M.B., C.M. (with Second-Class Honours), 1892. The Choroid Plexuses and

Cerebro-Spinal Fluid in Health and Disease.

Edward Fuller Martin, England, M.B., C.M., 1879. Some Points in the Management of the Third Stage of Labour and the Puerperal State.

50* James Ernest Moorhouse, England (M.A.), M.B., C.M., 1892. The Etiology and Treatment of Albuminuria and Eclampsia Gravidarum.

Sylvanus Glanville Morris, Wales, M.B., C.M., 1893. Public Health and Micro-Organisms or Micro-Organs, their varieties, their distribution, their power for good or for evil, and the methods discovered to increase or inhibit these powers.

* George Ernest Morrison, Australia, M.B., C.M., 1887. The Hereditary Factor in the Causation of various Malformations and Diseases.

* William Murray, Scotland, M.B., C.M., 1891. Tatooing considered as a means of Inoculating Disease, especially Tuberculosis.

** George Newman, England, M.B., C.M., 1892. A Comparative Study in Public Health: the History and Causes of the decline of Leprosy in England and in India.

55 Maxwell Ogilvy-Ramsay, Scotland (M.A.), M.B., C.M., 1890. On the Prevention of Sepsis in the Lying-in-Room.

* John Donald Pollock, Scotland, M.B., C.M., 1892. Chronic Endometritis: its Importance and Local Treatment, with cases.

Samuel Poole, England, M.B., C.M., 1889. Epidemic Influenza as it occurred periodically since 1889.

George Porter, England, M.B., C.M., 1892. Empyema in Children, with special reference to Surgical Treatment.

*** James Ritchie, Scotland (M.A., B.Sc.), M.B., C.M. (with Second-Class Honours), 1888. Some Contributions to the Theory of Germicidal Action.

60* John Fordyce Robertson, Scotland (M.A.), M.B., C.M., 1891. Puerperal Fever: its Nature, Prevention, and Treatment, with six cases.

** William Ford Robertson, Scotland, M.B., C.M., 1891. Researches upon the Pathology of Subdural Membrane Formation.

Robert Miller Ronaldson, Ireland, M.B., C.M., 1890. Dyspnœa.

** John Ross, Scotland, M.B., C.M., 1886. Diphtheria: its Evolution from benign Sore Throat.

** Theodore Shennan, Scotland, M.B., C.M., 1890. Contributions to the Knowledge of (1) Viburnum Prunifolium (or Black Haw)

and of (2) Catha Edulis (African Tea).

65** James Christian Simpson, Scotland, M.B., C.M., 1887. General and Mental Symptoms in relation to Somatic Disease, Anaesthetics and Toxic Agents, Traumata, and Surgical Procedures, with a Review of the Treatment of some Cerebral and Mental Symptoms by Operation.

George Thomas Sinclair, Orkney, M.B., C.M., 1886. Clinical Studies.

* William Sproule, New South Wales, M.B., C.M., 1892. Observations on Splenic Leucocythæmia.

Walter Henry Skinner Stalkartt, India, M.B., C.M., 1887. Malarial Fevers, with reference to some types on the West Coast of Africa.

*** Andrew Walker, Scotland (M.A., B.Sc.), M.B., C.M., 1892. An Examination of some of the Rarer Pathological Conditions associated with Pregnancy.

70 James Smith Watson, Scotland, M.B., C.M., 1881. Vomiting of Pregnancy: its Etiology and Treatment.

Thomas Alexander Miller Wilson, Scotland, M.B., C.M., 1891. The Main Factors concerned in the Production of Varicose Veins of the Lower Extremities, with some Considerations as to Surgical Treatment.

GRADUATES (M.B., C.M.) WHO HAVE PASSED THE EXAMINATIONS WITH HONOURS FROM 1889 TO 1895, BOTH YEARS INCLUDED. [1]

1889.

Class I.

Robert Oswald Adamson (M.A.), Scotland
John William Crerar, Scotland
William Fred. Farquharson, Scot.
James Lackie, Scotland
Jas. Hill Williamson Laing (M.A., B.Sc.), Scotland
Hamilton Graham Langwill, Scot.
Alexander Maclean, Scotland
Eustace G. Pilgrim, Barbados
Wm. Gordon Woodrow Sanders, Scotland
James Andrew Thyne, Scotland
George Wilkinson, England

Class II.

Robert Dunlop Reid Allison, Scot.
William Everett, England
George Alfred Walter, England
Colin Gordon, England
Ewan John Maclean, Wales
James Monteith, Scotland
Benjamin Sweeten, Scotland
C. N. C. Wimberley, Scotland

1890.

Class I.

Charles James Whitehead Dixon, England
Carstairs Cumming Douglas, Scotland
Gerald Fitzgerald, Scotland

[1] For names of those who received the Degrees with Honours prior to 1889, see Historical Appendix to List of Graduates of the University, published in 1889, pp. 129-132.

Robert Main Horne, Scotland
Colin Forbes Lees, Scotland
William Paterson, Scotland
George William Thompson, La Plata
William Kerr Walker, Scotland

Class II.

Ed. H. Alexander, New Zealand
Robert Brown, Scotland
John Wheeler Dowden, Ireland
George Balfour Marshall, Scotland
Arnold W. Williams, England

1891.

Class I.

John Wardle Bone, England
Wm. Blackley Drummond, Scot.
George Elder, Scotland
Edward Barnard Fuller, Africa
Henry Baker Hall, England
George Hennan, Scotland
Herbert Saunders Wansbrough Jones (B.Sc.), Wales
Harry Rainy (M.A.), Scotland

Class II.

Robt. J. Ashton (B.A.), England
Robert Cran, Scotland
Frederich Wilhelm Eurich, Saxony
David J. Mackenzie (M.A.), Scot.
John Orr, Scotland
David Stuart, Scotland
Wm. J. Walker (B.A.), Australia
Neish Park Watt (M.A.), Scotland
John Thos. Wilson, Tasmania

1892.

Class I.

Alexander Brownlie, Scotland
Charles Cromhall Easterbrook, (M.A.), England
George Home, New Zealand
Lim Boon Keng, Singapore
Robert Murray Leslie (M.A., B.Sc.), Scotland
Donald Macaulay (M.A.), Scot.

Class II.

Alexander Douglas (M.A.), Eng.
Daniel Charles Edington, Scot.
John James Evans, Wales
Arthur Fells, England
James Stewart Fowler, Scotland
Robert Walker Gray, Scotland
Robert John Johnston, Scotland
Geo. Wm. F. Macnaughton, Scot.
Philip Oscar Malabre, Jamaica
Peter William Shaw, Scotland
Alfred George Talbot (B.A.), New Zealand
George Templeton, Scotland

1893.

Class I.

Charles Crerar, Scotland
John Buchanan Duff, Scotland
Alex. M. Easterbrook, Scotland
Wm. E. Fothergill (M.A., B.Sc.), England
Robert Hutchison, Scotland
Robert H. Makgill, Scotland
Jas. V. Paterson, M.A., Scotland
David W. Sutherland, Australia
Hugh Walker (M.A.), Scotland
D. A. Welsh (M.A.), Scotland

Class II.

William Randolph Center, Scot.
Robert Craig Dun, Scotland
George Harry Dupont, England
Charles Alfred Hogg, Tasmania
Charles Kerr, Scotland
James G. Macnaughton, Scotland
W. M'D. Selby, Scotland
St John Stanwell, England
John Steed, England
John Tennant (M.A.), Scotland
John Brown Yeoman, Scotland

1894.

Class I.

James Martin Beattie (M.A.), New Zealand
Evan John Hewat Fraser, England
George Brooke French, England

Thomas Gibson (M.A.), Ireland
John Rutherford Gilmour, Scotland
Neil MacVicar, Scotland
William Anderson Stephen (M.A.), Scotland
James Purves Stewart (M.A.), Scotland

Class II.

Robert William Beesley, England
Robert Ward Briggs, England
Alexander Keith Campbell, Scot.
Thomas H. C. Derham, England
Charles Francis Lassalle, W. Indies
James Donald Macrae, Scotland
Hezlett Hamilton Marshall, Australia
Arthur Maxwell Nicholson Pringle, Scotland
Walter Russell Strapp, Natal

1895.

Class I.

Joseph Edward Bowes, England
John Forbes (M.A.), Scotland
William John Gaibritt, England
Rhodes Hay Garth, England
Andrew Robertson Wilson (M.A.), Scotland
William De Wever Wishart, British Guiana

Class II.

James Gray, Scotland
Albert Lewis Husband, England
Robert MacWilliam Leith, Cape Colony
William Lillie, India
David Rankine (M.A.), Scotland
David Waterston (M.A.), Scotland
James Rodger Watson (M.A., B.Sc.), Scotland

Bachelors of Medicine and Masters in Surgery.

1st August 1895.

Small CAPITALS *indicate First-Class Honours.*

Italics Second-Class Honours.

Sol Jervois Aarons, Australia
James Allison, Scotland
Charles Walker Anderson, Scotland
George Anderson, South America
5 Harry Hyndman Balfour, Scotland
Noel Dean Bardswell, England
William Begg (B.A.), Australia
James Alexander Terras Bell, New Zealand
Henry Mitchell Benson, England
10 Edwin Thomas Fairweather Birrell, Scotland
John Edwin Blackburn, Mauritius
George John Blackmore, New Zealand
JOSEPH EDWARD BOWES, England
Lawrence Bowman, England
15 Edward Edelsten Brierley, England
Nathaniel Caine, England
Henry Jasper Cardale, England
Sidney Herbert Carr, England
Walter William Chipman, Canada
20 William Joseph Campbell Coulthard, England
John Crawford, Scotland
Robert Cross, England
Robert Wiseman Cunningham, Scotland

John M'Ewen Dalziel, Scotland
John Maxwell Dawson, Scotland
Maurice Vincent Dee, Ireland
Thomas Dewar, Scotland
Albert Whiggs Easmon, West Africa
Walter Forrest Eason, Scotland
Heinrich James Ewald, West Indies
Hugh Middleton Eyres, England
Albert Gershom Fenn, England
Francis Wiremu Brian Fitchett, New Zealand
Alexander Mathers Fleming, Scotland
JOHN FORBES (M.A.), Scotland
John Forbes (M.A., B.Sc.), Scotland
James Aquilon Forrest, Antigua
John Sutherland Fraser, Scotland
WILLIAM JOHN GARBUTT, England
Frederick Gardiner, Scotland
William Alexander Gibb, Scotland
Thomas Gibson, Scotland
John Gilchrist, Scotland
Samuel James Gilfillan (M.A.), Scotland
James Gillies, Scotland
James Davie Gilruth (M.A.), Scotland
Wilfrid Glegg, Scotland
Cecil John Gorringe, Tasmania
David James Graham, Scotland
James Gray, Scotland
Edward David Wilson Greig, Scotland
James Muir Grieve (M.A.), Scotland
John Howell Knight Griffith, Wales
Henry Halton, England
John Binny Hay, Cape of Good Hope
RHODES HAYGARTH, England
Charles Monro Hector, New Zealand
Robert Paterson Heddle, Scotland
George Henderson (M.A.), Scotland
George Pouncey Henderson, England
John Hunter Henderson, New Zealand
Ian Dalrymple Clark Howden, Scotland
Michael Hughes, Wales
William Harry Hunter, Scotland
Harold Edward Huntly, England
Albert Lewis Husband, England
David Mount Hutton (B.Sc.), England
George John Jenkins, Australia
David John Jones, Wales
John Ingoldsby Kelly, Scotland
Laurence Ker (M.A.), England
James Kirk, Scotland
David Landsborough, Scotland
John Landsborough, Scotland
Leo Victor Laurie, Scotland
David Lawson, Scotland
Henry Alfred Leebody, Ireland
Robert MacWilliam Leith, Cape Colony

Thomas Griffiths Lewis, Wales
80 *William Lillie*, India
Grant Forrester Lundie (M.A.), South Africa
Alfred Crichton Lupton, England
Samuel Finlay Lusk, Ireland
Pieter Christoffel Lüttig (B.A.), Cape Colony
85 Robert M'Camon, Scotland
Alexander MacCarthy-Morrogh, Ireland
Angus Macdonald (M.A.), Scotland
Frank Bedingfeld Macdonald, Scotland
John M'Donald, Scotland
90 William Marshall Macdonald, New Zealand
William Chisholm Wilson M'Dowell (B.A.), New Zealand
Thomas Hately Macfie, Scotland
Duncan Matheson Mackay, England
Charles M'Laurin, Australia
95 Kenneth MacLean, Scotland
John George Macmillan, Australia
Neil Harrismith Macmillan, South Africa
William Stevenson Malcolm, Scotland
William Rhoades Mander, England
100 William Lewis Martin (M.A., B.Sc.), Scotland
Francis Joseph Robert Momplé, Mauritius
Robert Leishman Moorhead, England
John Stewart Norwell (B.Sc.), Scotland
Thomas Theodore Ormerod, England
105 Edward Lloyd Owen, Wales
Richard Owen, Wales
John Arthur Parsons, England
Charles William Peach, Scotland
Henry Carden Pearson, England
110 Arthur Davies Peill, England
Guthrie Raynes Plante, New Zealand
William Alexander Potts (B.A.), England
Walter Henry Price, India
George Lionel Procter, England
115 James Coupar Rait, Scotland
David Rankine (M.A.), Scotland
Malur Srinivasa Rau (M.A., B.Sc.), India
John Kimber Raymond, England
Ernest Stewart Reid, England
120 Hugh Richardson, Scotland
William Pearson Richardson, England
Robert James Risely, England
Griffith Lloyd Roberts, Wales
Robert George Robson (M.A.), Scotland
125 Thomas Ernest Earl Roddis, England
Victor Alexander Ross, Scotland
Richard Roycroft, Ireland
Thomas Duncanson Sadler, Scotland
Robert Samut, Malta
130 Ernest Walker Kerr Scott, Queensland
Robert George Selby, England
Henry John Forbes Simson, Scotland
Ernest Murray Skeete, West Indies
Esaias Renier Snijman, South Africa

135 Joseph Edward Wilson Somerville, New Zealand
Frederic Skey Stanwell, England
William Hugh Steele, England
Alexander Steven, Scotland
George Edward Stewart, Canada
140 William Stokes, India
John Cuthbert Stuart, England
Thomas Stuart, England
David Carlyle Sutton, England
William Macrae Taylor, Scotland
145 Frank Stewart Corbett Thompson, Australia
James Alexander Thwaits, South Africa
James Bain Kerr Tough, Scotland
John Ogilvie Veitch, Scotland
Gerald Wallace (M.A.), Scotland
150 *David Waterston* (M.A.), Scotland
James Rodger Watson (M.A., B.Sc.), Scotland
James Watt, New Zealand
ANDREW ROBERTSON WILSON (M.A.), Scotland
WILLIAM DE WEVER WISHART, British Guiana
155 James Wood, Scotland
John Burn Wood, Scotland

26TH OCTOBER 1895.

James Affleck, Scotland
Arnold William Montford Auden (B.A.), England
Ayatullah, India
William Jarvis Bell, America
5 Ernest James Bray, Australia
John Bruce, Scotland
Robert Brown Campbell, Scotland
Edward William Scott Carmichael, Scotland
John Mandall Coates, Scotland
10 James Mansfield Crawford, Ireland
Donald Crerar, Scotland
David Fitchie Dewar, England
James Herbert Dixon, England
George Christopher Elliott, England
15 Alfred Thomas Evans, Wales
David Evans, Wales
William Evans, England
Ramsden Walker Luis Fernandes, England
William Fitzgerald, New Zealand
20 Archibald Nicol Fleming, Scotland
George Algernon Fothergill, England
Francis Maitland Gibson (B.Sc.), Scotland
Roger Christian Lingard Guthrie, Scotland
John James Hewison (M.A.), Scotland
25 William Hewison, Scotland
John Hirst, England
Walter Johnson, England
Chaman Chandu Lall, India
James Henry Lamb, Scotland
30 Gerald Rowley Leighton, Eng.
George Robert Livingston, Scotland
Alexander Mayne Love, Ireland
George Douglas M'Rae, Scotland

James Sackville Martin, Ireland
35 James Massey, Ireland
George Henry Masson, Trinidad
William Andrew Wylie Moore, Ireland
Patrick James Munn, Scotland
Stewart Grant Ogilvy, Scotland
40 Alexander John Park, Australia
Archibald Lumsdaine Pentland-Smith (M.A., B.Sc.), Scotland
Robert Black Purves, Scotland
John Howard Digby Roberts, India
Robert Steuart Rodger, England
45 Robert Lloyd Roe, Ireland
David Roger, Scotland
Alfred Peter Ross, England
Luis Cupertino Saldanha, India
James George Campbell Scott, Scotland
50 Bernard Ian Graham Sibbald, Scotland
Sydney Harold Smith, England
Arthur John Arundel Theobalds, England
Charles Gurney Thompson, England
Jacob William de Vos, Cape Colony
55 Lewis Arthur Williams, England
Frederick Telemachus Wills, British Guiana
William Henry Wilson, Eng.

11TH APRIL 1896.

William Leslie Lyall, Scotland
Arthur Thomas Sampson, England
James Stenhouse, Scotland
Frederick William Twidale, India
Andrew Wallace, Scotland

THE DEGREE OF MASTER IN SURGERY.

1ST AUGUST 1895.

Edward Fuller Martin (M.D.), England.

Examination Papers for Degrees in Medicine.

PRELIMINARY EXAMINATION.

ENGLISH.

FIRST PAPER (OLD MODEL).

SATURDAY, *28th September* 1895.—9 *to* 11 *o'clock.*

(FIVE *questions to be answered and no more. Questions* 1, 2, *and* 6 *must be attempted.*)

1. Write an essay, from two to three pages long, on one of the following subjects :—

(*a*) King James as he appears in *The Fortunes of Nigel.*

(*b*) The Life of a Country Doctor.
(*c*) The Possibility of Abolishing War.

2. Paraphrase :—Prologue to Drydren's "Œdipus."

When Athens all the Grecian states did *guide*,
And Greece gave laws to all the world beside ;
Then Sophocles with Socrates did sit,
Supreme in wisdom one, and one in wit :
And wit from wisdom differed not in those,
But as 'twas *sung* in verse or said in prose.
Then Œdipus in crowded theatres
Drew all admiring eyes and listening ears ;
And every critic of each learned age
By this just model has reformed the stage.
Now *should it fail* (as Heaven *avert* our fear !),
Damn it in silence lest the world should hear.
For, were it known this poem did not please,
You might set up for perfect savages ;
Your neighbours would not look on you as men,
But think the nation all turned Picts *again*.

3. Give a *general* analysis of the first six lines of the foregoing passage, and parse the words italicised.

4. Derive six of the following words :—*Fortnight*, *rage*, *hemorrhage*, *harbour*, *physiology*, *style*, *frail*, *botany*, *yacht*, *boycott*, *cordial*, *beef-eater*.

5. Give instances of the use, as different parts of speech, of *six* of the following :—*Still*, *but*, *since*, *even*, *which*, *fare*, *so*, *the*.

6. Improve the following sentences, and give reasons for the alterations that you make :—

(*a*) He is our natural benefactor, and deserves our respect and obedience.

(*b*) A talent of this kind would perhaps prove the likeliest of any other to succeed.

(*c*) All the power of ridicule, aided by the desertion of friends and the diminution of his estate, were not able to shake his principles.

(*d*) I conceived a great regard for him, and could not but mourn for his loss.

SECOND PAPER (OLD MODEL).

SATURDAY, *28th September* 1895.—12 *to* 2 *o'clock.*

(EIGHT *questions are to be answered and no more; and of these,* TWO *from each section.*)

SECTION A.

1. Who were the Lake Poets? Give some account of the life and works of any *one* of them.

2. Give some account of *one* of the following works:—*The Pilgrim's Progress* (either part); *Gulliver's Travels* (any one expedition); *Enoch Arden; Childe Harold; Oliver Twist; Vanity Fair.*

3. Name the authors of the following works, and give some account of any one author:—*The Canterbury Tales; Tamburlaine; Comus; The Rape of the Lock; Tom Jones; The Deserted Village; Vanity Fair; In Memoriam.*

4. Give some account of *three* of the following characters:—

The wife of Bath, Sir John Falstaff, Prospero, Portia, Dr Primrose, Edie Ochiltree, Caleb Balderston, Mr Micawber, Enid, John Silver.

SECTION B.

5. (*a*) Reproduce the substance of Mark Antony's speech over the body of Cæsar.

Or,

(*b*) Reproduce the substance of the dispute between Brutus and Cassius. What light does it throw upon the character of Cassius?

6. (*a*) Sketch the character of George Heriot, and indicate the part he plays in *The Fortunes of Nigel.*

Or,

(*b*) Describe the incidents of Nigel's meeting with the King in Greenwich Park, and show how they illustrate some of the characteristics of Charles and Buckingham.

SECTION C.

7. Give an account of the causes and progress of the American War of Independence, and note the leading statesmen and soldiers concerned on each side.

8. Write short notes illustrating the historical importance of *six* of the following:—Sir Robert Walpole, the Duke of Cumberland, John Wilkes, Hyder Ali, Edmund Burke, Henry Addington, Admiral Duncan, Lord John Russell, Lord Brougham.

9. Describe briefly the various efforts made by the partisans of the House of Stuart in the reigns of George I. and George II. to regain the throne for the exiled family.

10. Write short notes upon *six* of the following:—The Treaty of Utrecht; the Excise Bill; the Treaty of Aix-la-Chapelle; the Walcheren Expedition; the Bombardment of Algiers; the Abolition of the Slave Trade; the Armed Neutrality; the Legislative Union of Great Britain and Ireland; the Lines of Torres Vedras; Catholic Emancipation; the Premiership of the Duke of Wellington; the Poor Law Reform Bill; the Congress of Vienna.

SECTION D.

11. Specify the chief textile manufacturing districts of the United Kingdom, naming the chief seats of the manufacture, and say whence in the case of each industry the raw material is obtained, and by what seaport.

12. Draw a map of India, inserting rivers, mountain ranges, and chief towns.

13. State the chief products of *five* of the following regions, and name and locate in each of those selected an important town:—Manitoba, British Columbia, Jamaica, British Guiana, Natal, West Australia, Tasmania, Burmah.

14. Locate and write a brief note upon *ten* of the following:—Trieste, Rangoon, Yokohama, Dunedin, Pretoria, Valparaiso, Bahia, Herat, Moukden, Odessa, Belize, Brindisi, Ballarat, Lyons, Astrakhan.

(NEW MODEL.)

SATURDAY, *28th September* 1895.—9 *to* 12 *o'clock.*

(EIGHT *questions to be answered, and no more.* 1 *and* 2 *must be answered, and either* 3 *or* 4, *and either* 5 *or* 6. *The remaining four may be any questions in the paper not already answered.*)

1. Write an essay, from two to three pages long, upon one of the following subjects :—

(*a*) Gulliver's Travels.
(*b*) The Life of a Country Doctor.
(*c*) The Possibility of Abolishing War.

2. Express in prose the following passage :—

"O patriot statesman, be thou wise to know
The limits of resistance and the bounds
Determining concession ; still be bold
Not only to slight praise but suffer scorn ;
And be thy heart a fortress to maintain
The day against the moment, and the year
Against the day ; thy voice, a music heard
Thro' all the yells and counter-yells of feud
And faction, and thy will a power to make
This ever-changing world of circumstance
In changing, chime with never-changing law."

3. Say what you know of *four* of the following :—The Roman occupation of Britain ; the period of Danish rule in England ; the relations of Scotland and England in the Norman period ; the Civil War in Stephen's reign ; Henry II.'s contest with the Church ; Magna Charta ; Henry V.'s campaign in France ; the relations of England and Scotland in the reign of James IV. ; Perkin Warbeck ; the Progress of the Reformation in Edward VI.'s reign ; the rule of the Regent Moray in Scotland ; the Spanish Armada ; the English in Ireland in Elizabeth's reign ; Mary Stuart in England.

4. Say what you know of *four* of the following :—The

Duke of Buckingham; Cromwell's share in the Civil War; Ireland under the Commonwealth; the Earl of Clarendon; Monmouth's rebellion; the Revolution of 1688 in Scotland; the War of the Spanish Succession; Walpole's Administration; Clive's work in India; the Conquest of Canada; the loss of the American colonies: the chief naval successes in the great war with France; the Peninsular War; the chief provisions of the Reform Bill of 1832.

5. Mention the British possessions and protectorates in Africa, and note for each the products, and the situation of the chief towns.

6. State the position of *six* of the following districts:— Ontario, New South Wales, the Argentine Republic, Bavaria, Bengal, Pennsylvania, Algeria, the Punjaub. Mention either (*a*) a mountain range, *or* (*b*) a river; also name and locate an important town in each of the districts selected.

7. Improve either in expression or in structure the following sentences, and give reasons for each change made:—

(*a*) "My old friend, after having seated himself, and trimmed the boat with his coachman who, being a very sober man, always serves as ballast on these occasions, we made the best of our way to Fox-hall."

(*b*) "Our sympathies are naturally divided as to the revolting Armenians."

(*c*) "A talent of this kind would perhaps prove the likeliest of any other to succeed."

(*d*) "Looking to the last contest, the chances of the two candidates are about even, and it is not possible to predicate either who is the best of the two, nor which will prove the more superior."

8. Give a *general* analysis of the following passage, and parse the words italicised:—

"To thee I call,
But with no friendly voice, and add thy name
O *Sun, to tell thee* how I hate thy beams,

That bring to my remembrance from *what* state
I fell, how *glorious once* above thy sphere."

9. Give instances of the use as different parts of speech of *six* of the following: —*Still, but, even, since, which, fare, so, the.*

10. Derive *nine* of the following words:—*Rage, hemorrhage, harbour, style, physiology, frail, botany, yacht, boycott, cordial, beef-eater, fortnight.*

11. Name the authors of *six* of the following works, and give an account of one of the works:—*Arcadia, Cymbeline, As You Like It, Lycidas, Hudibras, Roderick Random, The Task, The Prisoner of Chillon, Adonais, The Newcomes, Annals of the Parish, Redgauntlet, Silas Marner, Barnaby Rudge.*

12. (*a*) Give some account of the process by which a Bill introduced into the House of Commons becomes a law of the land.

Or,

(*b*) Explain what is meant by a limited liability company.

Or,

(*c*) Explain what is meant by a system of Protection, *or*, of Bimetallism.

FIRST PAPER (OLD MODEL).

SATURDAY, 28*th March* 1896.—9 *to* 11 *o'clock.*

(FIVE *Questions to be answered. Questions* 1, 2, *and* 6 *must be attempted by all.*)

1. Write an essay, from two to three pages long, on one of the following subjects:—

(*a*) Simon, the Glover, in the *Fair Maid of Perth.*

(*b*) Advantages and disadvantages of Colonies to the Mother Country.

(*c*) The qualities required in a successful doctor.

2. Paraphrase:—

. . . "Man, immured in cities, still retains
His inborn inextinguishable thirst

Of rural scenes, compensating his loss
By supplemental shifts the best he may.
The most unfurnish'd with the means of life,
And they that never pass their brick-wall bounds
To range the fields, and treat their lungs with air,
Yet feel the burning instinct; overhead
Suspend their crazy boxes, planted thick,
And water'd duly. There the pitcher stands
A fragment, and the spoutless teapot there:
Sad witnesses how close-pent man regrets
The country, with what ardour he contrives
A peep at Nature when he can no more.
Hail, therefore, patroness of health and ease,
And contemplation, heart-consoling joys,
And harmless pleasures, in the throng'd abode
Of multitudes unknown! hail, rural life!"

3. Give a *general* analysis of the following passage, indicating clearly the connection between the clauses. Parse the words italicised in it:—

As the cur,
Pluck't from the cur he fights *with*, *ere* his cause
Be cooled by fighting, follows, *being named*,
His *owner*, but remembers all, and growls
Remembering, so Sir Kay beside the door
Mutter'd in scorn of Gareth, *whom* he *used*
To harry and to hustle.

4. Give the derivation of *six* of the following words:—*Curfew*, *chancellor*, *cicerone*, *alms*, *kerchief*, *peasant*, *homage*, *wanton*, *wassail*, *currants*, *vinegar*, *stoical*.

5. Explain and exemplify the following terms:—*Diphthong*, *verbal noun*, *finite verb*, *noun clause*, *reflexive pronoun*. Show, also, the difference in use between:—*Further* and *farther*, *elder* and *older*, *latter* and *later*.

Write down separately, and give the force of (*a*) the prefixes in:—*Disdain*, *ignorance*, *purpose*, *disaster*, *benumb*, *antidote*, *withstand*; and (*b*) the suffixes in:—*Worship*, *chivalry*, *wisdom*, *necessity*, *other cadence*, *seldom*.

6. Improve the following sentences, and give reasons for the changes you make:—

(*a*) I saw my old school-fellow again by mere accident when I was in London, at the time of the first Exhibition, walking down Regent Street, and looking in at the shops.

(*b*) I would be sorry to accept a different belief on the subject than this, that if a man once knew a habit to be injurious, he was capable of emancipating himself from it.

(*c*) Being particularly gracious towards Longfellow, and having just written that authors were like cats, sure to purr when stroked the right way of the fur, Longfellow interrupted him with: "I purr, I purr."

(*d*) The veracity of this story is questionable, and there is the more reason for doubting the truth of the narrator, because in his remarks on the observation of the Sabbath he distinctly alludes to a custom that can be shown never to have existed.

SECOND PAPER (OLD MODEL).

SATURDAY, 28*th March* 1896.—12 *to* 2 *o'clock.*

(EIGHT *Questions are to be answered; and of these,* TWO *from each section.*)

SECTION A.

1. Name the chief Scottish poets of the 14th and 15th centuries. Give a short account of the principal poems of any *two* of them.

2. Tell as clearly as you can the story of *one* of the following:—"Vision of William concerning Piers the Plowman"; "Squire's Tale" (Chaucer); "Ballad of Chevy Chase"; Marlowe's "Edward II."; Shakespeare's "Hamlet"; "Passing of Arthur" ("Idylls of the King"); "Virginians"; "Romola."

3. Name the authors of *eight* of the following works, state the time at which they flourished, and give an account of any *one* author:—*Induction to the Mirror for Magistrates; Arcadia; Catiline; Leviathan; Areopagitica; Annus*

Mirabilis : Tale of a Tub ; Idea of a Patriot King ; Essay on Criticism : Letters on a Regicide Peace ; Wealth of Nations ; Modern Painters : Earthly Paradise.

4. Describe *three* of the following characters :— *The Good Persoun* (Chaucer) ; *Banquo ; Polonius : Silas Marner ; Major Pendennis ; Will Honeycomb ; Mr Winkle ; Doctor Maclure ; Caliban : Monkbarns ; Guinevere.*

SECTION B.

5. (*a*) How does Shakespeare contrast the behaviour of the French leaders with that of the English on the eve of the battle of Agincourt? Describe fully.

Or,

(*b*) How is the character of "Henry V." developed by Shakespeare in the play?

6. Write a full account of the part played in the story by—

Either (*a*) *Hal o' the Wynd,*
Or (*b*) *The Fair Maid of Perth.*

SECTION C.

7. Give an account of the state of parties in Scotland during the reign of Robert III., and of the relations of Scotland with England and France at that time.

8. Write notes on *six* of the following :—Suetonius Paulinus in Britain ; Anglo-Saxon system of Government and judicial system ; effects of the Norman Conquest upon England ; Henry I.'s Charter of Liberties ; Constitutions of Clarendon ; Black Death and the Peasants' Revolt ; Pilgrimage of Grace ; Battle of Sauchieburn ; Battle of St Albans ; Benevolences.

9. Write, upon *six* of the following, notes to illustrate their historical importance :—Boadicea ; Laufranc ; Stephen Langton ; Simon de Montfort ; Cardinal Wolsey ; Earl of Warwick (King-maker) ; Margaret of Anjou ; The Maid of Orleans ; John of Gaunt ; John Knox ; William of Wykeham.

10. "Trace the course of the Reformation in England, *or* in Scotland, down to 1567."

SECTION D.

1. What are our chief imports from the United States, and what our chief exports to that country? Name and locate the chief sea-ports of the United States on the Atlantic sea-board.

2. What circumstances have helped to develop cotton manufactures in the western part of our island? Give the chief centres of the cotton manufacture in Great Britain, and the destination of cotton goods exported from this country.

3. What are our chief imports from Canada, Brazil, South Africa, New Zealand, India, West India Islands, Australia, Russia, Egypt. Name and locate parts in each from which goods are exported to Britain.

4. Locate and indicate in a note the importance of the following:—Riga, Kiel, Melbourne, Singapore, Hong-Kong, Durban, Mombasa, Karachi, Rangoon, San Francisco, Alaska, Baku, Smyrna.

(NEW MODEL.)

SATURDAY, 28*th March* 1896.—9 *to* 12 *o'clock.*

(EIGHT *Questions to be answered.* ONE *and* TWO *must be answered, and either* THREE *or* FOUR, *and either* FIVE *or* SIX. *The remaining* FOUR *may be any Questions in the paper not already answered.*)

1. Write an essay, from two to three pages long, upon one of the following subjects:—

(*a*) The influence of the press.

(*b*) The qualities required in a successful doctor.

(*c*) Sir Walter Scott's *Ivanhoe.*

2. Paraphrase the following passage:—

"Her fresh and innocent eyes
Had such a star of morning in their blue,
That all neglected places of the field
Broke into Nature's music when they saw her.
Low was her voice, but won mysterious way
Thro' the sealed ear to which a louder one

Was all but silence—free of alms her hand—
The hand that robed your cottage-walls with flowers
Has often toil'd to clothe your little ones;
How often placed upon the sick man's brow,
Cool'd it, or laid his feverous pillow smooth!
Had you one sorrow and she shared it not?
One burthen and she would not lighten it?
One spiritual doubt she did not soothe?
Or when some heat of difference sparkled out,
How sweetly would she glide between your wraths,
And steal you from each other! for she walk'd,
Wearing the light yoke of that Lord of love,
Who still'd the rolling wave of Galilee!"

3. Give some account of *four* of the following:—Roman Britain from 78 A.D.; Conversion of the English to Christianity; Struggle of the Barons with the Crown during the reigns of William II. and Henry I.; Conquest of Ireland in the time of Henry II.; John's Contest with the Church; Struggle of the Scots for Independence under Robert Bruce; Wars in France of Edward III.'s reign; State of parties in Scotland during the reigns of Robert III. and James I.; Elizabeth and Mary Queen of Scots; The "Sea-dogs" of Elizabeth's reign.

4. Tell what you know of *four* of the following:—The Feudal system in England under the early Norman Kings; Contest of Crown with the Church during reigns of Henry I. and Henry II.; Struggle of the Crown with the Barons under Henry III.; Joan of Arc; Henry VIII.'s breach with Rome; The Pilgrim Fathers; Charles I.'s contest with Parliament (1640-1642); Chief Acts of Parliament passed during reign of Charles II., with the main provisions in each; Trial of the Seven Bishops; Chief provisions of Revolution Settlement; The Union of the Scotch and English Parliaments; William Pitt, Earl of Chatham; Lord Nelson; The Chartists and the Free Trade Movement; The Crimean War.

5. Mention the chief island possessions of Great Britain in the Old World—outside the British Isles; and state

shortly the value of each to this country. Mention leading towns connected with each.

6. State what industries are associated with any *six* of the following river-basins :—Clyde, Trent, Shannon, Garonne, Charente, Ohio, La Plata, Essequibo, Ganges, Loire. Mention the most important industrial centres in each basin.

7. Improve the following sentences, and give reasons for the changes you make :—

(*a*) I saw my old school-fellow again by mere accident, when I was in London at the time of the first exhibition, walking down Regent Street, and looking in at the shops.

(*b*) I would be sorry to accept a different belief than this, that if a man once knew a habit to be injurious, he was capable of emancipating himself from it.

(*c*) Being particularly gracious towards Longfellow, and having just written that authors were like cats, sure to purr when stroked the right way, Longfellow interrupted him with : "I purr, I purr."

(*d*) The veracity of this story is questionable, and there is the more reason for doubting the truth of the narrator, because in his remarks on the observation of the Sabbath, he distinctly alludes to a custom that can be shown never to have existed.

8. Give a *general* analysis of the following passage, and parse the words italicised :—

> "'Tis the mass of men He loves ;
> And, *where there* is most sorrow and most want,
> Where the high heart of man is trodden *down*
> *The most*, *there* most He is, *for* there is He
> Most needed."

9. Explain and exemplify the following terms :—*Diphthong*, *verbal noun*, *finite verb*, *noun clause*, *double plurals*, *reflexive pronoun*. Show also the difference in use between : —*Further* and *farther*, *elder* and *older*, *latter* and *later*.

Or,

Write down separately and give the force of (*a*) the prefixes in :—*Disdain*, *ignorance*, *purpose*, *disaster*, *benumb*,

antidote, withstand; and (*b*) the suffixes in :—*Worship, chivalry, wisdom, necessity, other, cadence, seldom.*

10. Give the derivation of *six* of the following words :—*Curfew, chancellor, cicerone, alms, kerchief, peasant, homage, wanton, wassail, currants, vinegar, stoical.*

11. Name the authors of *six* of the following works, and give an account of one of the works :—*The Bruce; The Thrissel and the Rois; The Winter's Tale: Comus; The Rape of the Lock: Battle of the Books: The Seasons; The Traveller; The Gentle Shepherd: The Giaour; Marmion: Quentin Durward; The Caxtons; Felix Holt; The Cloister and the Hearth.*

12. Describe the proceedings consequent upon a dissolution of Parliament, from the appeal to the constituencies till the assembling of the new Parliament, and the formation of a new Ministry.

LATIN—GREEK—MATHEMATICS.

The Papers in Latin, Greek, and Mathematics are the same as the Lower Standard Papers in these subjects for Degrees in Arts and Science.

FRENCH.

TUESDAY, 1*st October* 1895.—3 *to* 6 *o'clock.*

I.

Translate into English :—

Le roi de France (Louis XI.), vaillant de sa personne, avait moins de courage dans ses résolutions que le duc Charles. Il avait aussi de bien plus grands embarras et plus de périls intérieurs dans le gouvernement de ses états ; mais c'était à la fois le plus actif et le plus patient des hommes. Lorsque le duc de Bourgogne avait conçu un projet, il s'y obstinait follement, et, quand enfin il y voyait trop d'obstacles, il se précipitait dans un autre. Le roi, au contraire, sans varier dans son dessein, ne mettait jamais nulle fierté à y réussir par un moyen plutôt que par un autre. La vivacité de son génie le portait à s'ennuyer assez vite de ce qui tardait trop, et alors il changeait non de but, mais de

chemin. Il réduisit ainsi tous ses ennemis les uns après les autres, sachant attendre l'occasion, et surtout réparer ses fautes, parce qu'il les connaissait et savait mieux que personne en quoi et pourquoi il s'était trompé. Quant à la ruse et au manque de foi, l'un ne pouvait guère en faire de reproches à l'autre ; mais chacun y faisait voir tout son naturel, et l'emportement du duc donnait quelque chose de brutal et de scandaleux à ses trahisons, comme à Péronne ou pour le connétable et la duchesse de Savoie. De même ils étaient tous les deux sanguinaires, ainsi que la plupart des princes de leur temps, et faisaient peu de compte de la vie des hommes ; mais le duc etait cruel par colère, et le roi par vengeance ; l'un fit périr plus de gens par les massacres, et l'autre par les supplices. BARANTE.

II. GRAMMAR.

1. Form three French sentences to show the three different meanings of *leur*.

2. Explain the use of the preposition *de* in "quelque chose de brutal" of the preceding passage. Give other instances of the same construction.

3. Give the plural of *beau-frère*, *porte-feuille*, *celui-ci*, *notre*, *le vôtre*, *sourd-muet*.

4. Name the French accents and explain their different functions.

5. Form adverbs from *doux*, *cher*, *bon*, *fort*, *cruel*, *poli*. Which of these adjectives may also be used as adverbs and under what circumstances? Give also the Present and Past Participle of *craindre*, *savoir*, *conduire*, *voir*.

III.

Translate into French :—

(*a*) George III. was one day visiting a small town in the south of England, and, being anxious to see something of the country, took a solitary walk. He came to a field in which there was only one woman at work. The king asked where all the rest were. She said they were all gone into the town to see the king. "Why didn't you go too?" said George.

"Why!" she answered, "I wouldn't walk three yards to see him. Besides, they have lost a day's work by going, and I am too poor to do that, with five children to feed." George slipped a sovereign into her hand, and said, "When the rest come back, tell them that, while they were gone to see the king, the king came to see you, and left you his portrait in gold to remember him by."

(*b*) When you have read the newspaper, give it to me. Do not be afraid, there is no danger. Give him something to eat, he seems to be very hungry. What a noise those children are making! Tell them to be quiet! We have not seen each other for the last ten years.

TUESDAY, 31*st March* 1896.—3 *to* 6 *o'clock.*

I. Translate into English :—

Le premier trait qu'on remarque alors en Italie, c'est le manque d'une paix ancienne et stable, d'une justice exacte, et d'une police surveillante comme celle à laquelle nous sommes habitués chez nous. Nous avons quelque peine à nous représenter cet excès d'anxiété, de désordres et de violences. Nous sommes depuis trop longtemps dans l'état contraire. Nous avons tant de gendarmes et de sergents de ville que nous sommes enclins à les trouver plus incommodes qu'utiles. Chez nous, lorsque quinze personnes se rassemblent dans la rue pour voir un chien qui s'est cassé la patte, un homme à moustaches arrive et leur dit : "Messieurs, les rassemblements sont défendus, dispersez-vous." Cela nous paraît excessif ; nous maugréons (*we object*) et nous oublions de remarquer que ces mêmes hommes à moustaches donnent au plus riche et au plus faible l'assurance de se promener seul et sans armes à minuit dans les rues désertes. Supprimons-les par la pensée, et figurons-nous un monde dans lequel la police soit impuissante ou indifférente. On trouve de semblables pays dans l'Australie, en Amérique, par exemple, dans les places où les chercheurs d'or accourent en foule et vivent au hasard, sans former encore un état organisé. Là, si l'on craint ou si l'on reçoit un coup ou une insulte, à l'instant on décharge son revolver sur le concur-

rent ou sur l'adversaire. Celui-ci riposte, et parfois les voisins s'en mêlent ; à chaque instant il faut défendre son bien ou sa vie, et le danger est là, brutal, subit, qui presse l'homme de tous les côtés. TAINE.

II. GRAMMAR.

1. Distinguish between any *six* of the following pairs :—le, la manche ; le, la vapeur ; le, la voile ; le, la manœuvre ; le, la mousse ; un, une enseigne ; le mépris, la méprise ; le côté, la côte ; le fil, la file.

2. Distinguish between :—(*a*) le ciseau, les ciseaux ; la pratique, les pratiques ; les aïeux, les aïeuls ; (*b*) de méchants vers, des vers méchants ; un triste personnage, un personnage triste ; un pauvre homme, un homme pauvre.

3. Make feminines of any *three* of the following adjectives, and of any *three* of the following substantives :—doux, roux, civil, gentil, dévot, sot ; le compagnon, le docteur, le gendre, le serviteur, le dieu, le loup.

4. Translate :—On Saturday, 21st March 1896, from half-past two to a quarter to four in the afternoon.

5. Answer any *one* of the following questions :—

(*a*) Give 3rd pers. sing. pres. indic. of :—mouvoir, s'asseoir, haïr, bouillir, naître, jeter.

(*b*) Give 3rd pers. sing. preterite of :—acquérir, savoir, s'en aller, tenir, écrire, croître.

(*c*) Give 3rd pers. sing. future of :—pouvoir, falloir, pleuvoir, envoyer, employer, mener.

(*d*) Give 2nd pers. sing. pres. subj. of :—mouvoir, falloir, voir, faire, plaire, devoir, acheter.

III. Translate into French :—

(*a*) A gentleman was walking along a street in London, when he met a man with only one arm who held out his hat to him with a smile. On looking at him more closely, he remembered having seen him somewhere before. The gentleman put a few coppers into his hat and said to him that he seemed to know his face. The beggar replied that he had seen him many a time passing a certain bridge. "But I thought that you were blind," said the gentleman.

"That is true, sir," said the beggar, "but a man must have a change from time to time. I am not working to-day because I wish to give my eyes a little rest. But I have asked a friend of mine to take my place on the bridge."

(*b*) 1. Did I not tell you? 2. I fear she has not told them the whole truth. 3. They never think of it, and I doubt very much whether they have remembered it this time. 4. As they do not allow that we should come down, we must stay here. 5. She wanted you not to speak so loud lest the infant should waken. 6. You should have answered his letter at once.

GERMAN.

WEDNESDAY, *2nd October* 1895.—3 *to* 6 *o'clock.*

I.

Translate into English :—

Es war am 5. November 1757 bei dem Dorfe Roßbach, eine Meile von Lützen, wo Gustav Adolf gefallen war, als eine der sonderbarsten Schlachten geliefert wurde. Der König lockte die Franzosen durch eine rückgängige Bewegung aus ihrer vorteilhaften Stellung. Sie glaubten er suche sich aus ihren Händen zu retten und bemühten sich daher, ihm in den Rücken zu kommen. Friedrich, der sich wieder gelagert hatte, verließ sich auf die Geschwindigkeit, mit welcher seine Truppen in Schlachtordnung gestellt werden konnten, sah daher den Bewegungen der Feinde gelassen zu und ließ seine Linien nicht einmal ausrücken. Das preußische Lager stand unbeweglich, und da es eben Mittagszeit war, beschäftigten sich die Soldaten mit ihren Mahlzeiten. Die Franzosen, welche dies in der Ferne sahen, trauten kaum ihren Sinnen; sie hielten es für dumpfe Verzweiflung, in der man selbst auf alle Verteidigung Verzicht leistet. Diese auf's höchste gespannte Erwartung war nicht wenig Ursache ihres so geringen Widerstandes und ihres panischen Schreckens. Der General Seydlitz nämlich kam mit der preußischen Reiterei auf einmal hinter einem Hügel hervor und stürzte wie ein Donnerwetter mit künstlichen Wendungen auf den hoffnungstrunkenen Feind los. Was nie auf einem Schlachtfelde erhört war, geschah hier; die leichtbewaffneten Husaren mit ihren behenden Pferden waren verwegen genug, die schwere französische Reiterei trotz ihrer kolossalen Rosse anzufallen. Sie wurde über den Haufen geworfen. Soubise ließ die Nachhut verrücken; allein kaum zeigte sie sich, so wurde sie auch aus dem Felde geschlagen.

Archenholtz.

II. Grammar.

1. Give the genitive of: Hans, Auguſtus, Sophie, Friederich Schiller, Kaiſer Franz, Karl der Große.

2. Give instances of the use of the accusative and genitive respectively to denote time.

3. Give the feminine of: Gott, Hund, Edelmann, Prinz; and explain the difference of the feminine formation in die Deutſche and die Franzöſin, corresponding to der Deutſche, der Franzoſe, respectively.

4. What cases are governed by the following prepositions and verbs: nach, für, auf, neben, gehorchen, folgen. Give instances in each case.

5. Give the third person singular of the present and imperfect indicative and the past participle of wiſſen, laufen, graben, bitten, beten, ziehen.

III.

Translate into German:—

(*a*) Fox, the great statesman, who was the rival of Pitt, owed a tradesman twenty pounds; and the tradesman, who had often asked him for it, called one day and found Fox counting money. "Ah! sir," cried he, "I am glad to see you have plenty of money to-day; perhaps you will be good enough to pay me my little bill." Fox answered that he was very sorry, but he really could not: he owed the money to Mr Sheridan, and it was a debt of honour. "Well," said the tradesman, "I will make mine a debt of honour too," and he tore up the promissory note which Fox had given him for the money. Fox paid him at once, saying, "My debt to you is of older standing; Sheridan must wait."

(*b*) I wished you had been here. They believed it to be true. He left without looking back. We were most kindly received by our neighbours. He was very pleased with everything he saw. When we arrived they were just going to begin.

WEDNESDAY, 1*st April* 1896.—3 *to* 6 *o'clock.*

I.

Translate into English :—

Jetzt muß ich Dir doch auch noch etwas von meiner Reise erzählen.—Weißt Du wohl, daß Dein Freund einmal dem Tode recht nahe war? Erschrick nicht, bloß nahe, und noch steht er mit allen seinen Füßen im Leben. Am folgenden Tage nachdem ich meinen Brief an Dich in Göttingen auf die Post gegeben hatte, reisten wir von dieser Stadt ab nach Frankfurt am Main. Fünf Meilen von diesem Orte, in Butzbach, einem kleinen Städtchen, hielten wir an einem Morgen an einem Wirtshause an, den Pferden Heu vorzulegen, wobei Johann ihnen die Zügel abnahm und wir beide sorglos sitzen blieben. Während Johann in dem Hause war, kommt ein Zug von Eseln hinter uns her, und einer von ihnen erhebt ein so gräßliches Geschrei, daß wir selbst, wenn wir nicht so vernünftig wären, scheu geworden wären. Unsere Pferde aber, die das Unglück haben keine Vernunft zu besitzen, heben sich kerzengrade in die Höhe und gingen dann spornstreichs mit uns über dem Steinpflaster durch. Ich griff nach der Leine—aber die Zügel lagen den Pferden aufgelöst über der Brust, und ehe wir Zeit hatten an die Größe der Gefahr zu denken, schlug unser leichter Wagen um und wir stürzten.—Also an einem Eselsgeschrei hing ein Menschenleben.—Wir standen aber beide frisch und gesund wieder auf und umarmten uns. Der Wagen war ganz umgestürzt, die Räder zu oberst, ein Rad war ganz zertrümmert, die Deichsel (pole) zerbrochen, die Geschirre zerrissen. Das kostete uns drei Louisd'or und vierundzwanzig Stunden, dann ging es weiter—wohin? Gott weiß es.

H. v. Kleist.

II. GRAMMAR.

1. Give the nominative and genitive singular and the nominative plural, with the definite article, of the German words for any *six* of the following: *bird*, *village*, *tree*, *prince*, *queen*, *body*, *heart*, *name*, *soldier*, *cat*.

2. Give comparative and superlative of: naß, bunt, bitter, langsam, schwarz, hoch.

3. Decline singular and plural of: der (relat. pronoun), du, dasselbe.

4. Mention *two* prepositions governing the dative, *two* governing the accusative, and *two* governing both these cases. Give short examples.

5. Give the 3rd person singular present and past and the

past participle of any *six* of the following: anſehen, entlaufen antworten, arbeiten, halten, brechen, wiſſen, mögen, reiſen, leiten.

III.

Translate into German:—

(*a*) Robert Burns was standing one day upon the quay (Hafendamm, m.) at Greenock, when a wealthy merchant, who lived in that town, had the misfortune to fall into the water. As he could not swim he would certainly have died, had not a seaman jumped into the river and saved him. When the merchant had recovered (ſich erholen von) a little from his fright, he put his hand (greifen) into his pocket, took out a shilling and gave it to the sailor. The people who saw this were very angry that such a rich man should not reward the poor fellow better who had risked (wagen) his life for him. "My dear friends," said Burns, "don't you see that this gentleman must know best how much his life is worth. We all know his exact value now."

(*b*) 1. I asked her for a cup of tea. 2. He asked me if I had written to her. 3. You may read this book, if you like. 4. Give it to your brother, when you have seen it. 5. When he told me that I was right, it was too late. 6. On coming home we found that the letter had arrived after we had left the house.

FIRST PROFESSIONAL EXAMINATION.

CHEMISTRY.

MONDAY, 22*nd July* 1895.—10 *to* 12 *o'clock.*

(N.B.—*Express your meaning in words, and also by means of equations whenever possible.*)

1. How can Chromic Oxide be prepared from Chromic Anhydride? How can Chromic Anhydride be prepared from Chromic Oxide?

2. What takes place when Sulphuretted Hydrogen is added to an aqueous solution of each of the following:—(*a*) Potassium Chromate; (*b*) Potassium Permanganate;

(*c*) Sulphurous Acid; (*d*) Ferric Chloride; (*e*) Cupric Chloride?

3. What takes place when each of the following substances is boiled with excess of aqueous solution of Caustic Potash:—(*a*) Olive Oil; (*b*) Chloroform; (*c*) Common Alum; (*d*) Chrome Alum; (*e*) Ethyl Acetate?

4. Name three oxidising agents. Give two examples of the oxidising action of each.

5. Calculate (to two places of decimals) the percentage composition of Silver Acetate—

H = 1, C = 12, O = 16, Ag = 108.

MONDAY, *23rd March* 1896.—10 *to* 12 *o'clock.*

(N.B.—*Express your meaning in words, and also by means of equations whenever possible.*)

1. Describe three methods of oxidising hydrogen chloride, and three of reducing hydrogen sulphate. State in each case what conditions as to temperature and concentration you consider necessary.

2. What reactions occur when silver nitrate is added to aqueous solutions of the following:—(*a*) Hydrogen Chloride; (*b*) Sodium Sulphide; (*c*) Sodium Cyanide; (*d*) Sodium Thiosulphate; (*e*) Sodium Sulphite?

In each case describe all the phenomena which may be observed.

3. Starting from metallic lead, how would you prepare—(*a*) Lead Iodide; (*b*) Litharge; (*c*) Lead Sulphate; (*d*) Peroxide of Lead?

4. Give a method for the preparation of Ethylamine. What are the products of its combustion? How can alcohol be obtained from it?

5. What weight of metallic zinc is required for the precipitation of five grams of metallic silver from a solution of silver acetate?

H = 1, C = 12, O = 16, Zn = 65, Ag = 108.

ELEMENTARY BOTANY.

MONDAY, *22nd July* 1895.—1 *to* 3 *o'clock.*

(FOUR *Questions only to be attempted.*)

Illustrate your answers by Drawings.

1. Describe the structure of the flower in an Orchis. Point out the adaptations in flower to insect pollination. Draw its flower-diagram.

2. Write the life-history of any Fungus, and compare it with that of an Alga.

3. What is the difference between Meroblastic and Holoblastic segmentation of an egg? Illustrate your answer by the description of an example of each.

4. A seed of a dicotyledonous plant is sown under suitable conditions of temperature, moisture, and air. Describe the changes that occur in the seed, and the manner of growth of the young plant it contains up to the time of formation of the first epicotyledonary leaves.

5. Arrange the vegetable kingdom in groups and classes, giving diagnostic characters of each group and class.

MONDAY, *23rd March* 1896.—1 *to* 3 *o'clock.*

(FOUR *Questions only to be attempted.*)

Illustrate your answers by Drawings.

1. Write a short account of the process of Carbon-assimilation in green plants.

2. Describe the structure of the root in a monocotyledonous plant. Show how the structure you describe is related to the functions performed by the root.

3. What is meant by Definite Inflorescence? Classify the forms of this inflorescence, and give an example of each.

4. Compare the chief stages in the life-histories of a Moss and a Fern.

5. Describe the fruit in Cruciferæ, Orchideæ, Gramineæ, Umbelliferæ.

ELEMENTARY ZOOLOGY.

TUESDAY, 23*rd July* 1895.—10 *to* 12 *o'clock.*

(*Only* FOUR *Questions to be answered.*)

1. Write a short account of the Aquatic Carnivora (Pinnipedia), indicating especially (1) how they differ from the Fissipedia, and (2) their Geographical Distribution.

2. Contrast the Nephridia in Arenicola, Hirudo, and Anodon, and state what you know of the fate of the Nephridia in a young dogfish (Scyllium).

3. Describe the fore limb of a Fowl. What modifications are found in the fore limb of a Whale, a Bat, and a Horse?

4. What are the foetal membranes? In what animals do they occur, and what functions do they perform?

5. Write a short account of the intestinal parasites. What changes in structure are usually associated with a parasitic habit of life?

TUESDAY, 24*th March* 1896.—10 *to* 12 *o'clock.*

(*Only* FOUR *Questions to be answered.*)

1. What are the features common to a Snail, a Mussel, and a Squid, which lead us to classify all these animals as Molluscs? Write a short account of the habits of each of these animals.

2. Describe the development of the nervous system in a Vertebrate, and enumerate the parts of the adult brain which arise from the fore- mid- and hind-brain respectively.

3. Distinguish between the terms "homologous" and "analogous," and illustrate your answer by reference to the various forms of body cavity met with in the animal kingdom.

4. Mention the distinctive characters of the Tunicata; *or* describe the anatomy of a simple Ascidian. Upon what grounds are the Tunicata classified with the Chordata?

5. Point out in what respects Ornithorhynchus may be

considered lower in organisation than (1) Macropus and (2) Lepus.

PHYSICS.

TUESDAY, *23rd July* 1895.—1 *to* 3 *o'clock.*

(*Not more than* FOUR *Questions in all to be answered.*)

1. Account for the spherical form of free drops of liquid; and explain the difference in behaviour of water and mercury drops on a clean glass plate.

2. State various reasons for the conclusion that apparently homogeneous bodies such as water, mercury, &c., have a grained structure:—and point out one means of approximating to the limit at which heterogeneity begins.

3. Describe the successive effects of the continued application of heat to 10 lbs. of water substance, originally at —10°C. How much heat is required to effect the transition from each physical state to the next? How does pressure influence the relation between volume and temperature, and how does it affect the melting and boiling points?

4. What is Wave Motion? Compare and contrast, as regards the character of the motion and the forces involved, the following types:—Ocean waves, ripples, and the waves that constitute sound and light.

5. An object is viewed through a convex lens. Sketch the course of the rays from any point of the object to the eye, (1) When the image is real; (2) When it is virtual. A long-sighted person is unable to see objects distinctly at any distance less than 20 inches. To what extent will his range of vision be extended by a convex lens of 15 inches focal length?

6. Give Ohm's law, and define the quantities involved.

The electromotive force of a cell is 1·1 volts, and its resistance 0·1 ohm. Compare the currents produced in a wire of 10 ohms resistance, by one such cell, and by two cells in series, and also the amount of heat developed in unit time by the current in each case.

TUESDAY, 24*th March* 1896.—1 *to* 3 *o'clock.*

(*Only* FOUR *of the following Questions to be answered.*)

1. Define the terms *Unit of Heat, Specific Heat, Latent Heat, Dynamical Equivalent of Heat.*

Taking the specific heat of ice as ·5, and its latent heat as 80, find how many units of heat are required to raise 10 lbs. of ice from − 20°C. to + 20°C. Show how to express the result in foot-pounds.

2. Explain what is meant by the terms *Amplitude*, *Period*, and *Phase*, in relation to wave motion, and illustrate each of these characteristics by reference to phenomena in Light and Sound.

3. Show how to determine experimentally any two of the following quantities :—(*a*) the Specific Gravity of a substance; (*b*) the Focal Length of a Convex Lens; (*c*) the Electrical Resistance of a given wire; (*d*) the form of the Lines of Force near a thin bar magnet.

4. State and prove the law of efflux of water through a small orifice in the side of the containing vessel. If the water be allowed to escape through a tube, what new force comes into action, and how does its effect depend on the bore of the tube?

5. Explain the mode of propagation of sound, and state its effects on the temperature of the air through which it passes. What is its speed, and what would be its speed if no change of temperature took place.

6. Describe the *principle* of the Leyden Jar, and show how its capacity (which define) depends upon the nature and thickness of the material of which it is made. Why must one of the coatings be put to earth in order that the jar may be fully charged?

SECOND PROFESSIONAL EXAMINATION.

ANATOMY.

WEDNESDAY, 17*th July* 1895.—10 *to* 12 *o'clock.*

1. Which spinal nerves form the Brachial plexus? What is their mode of arrangement in it? Name the branches

which arise, both above and below the Clavicle, and state the parts of the plexus from which they spring.

2. Give the position and connections of the Gastro-Hepatic Omentum. Describe the origin and course of the arteries between its two layers. What is the minute structure of a serous membrane?

3. Name the peduncles of the Cerebellum, and state, in general terms, the connections which they establish.

4. Give the systematic dissection of the Spermatic Cord in the inguinal region. Name, in proper order, its coverings, and describe the position, extent, and boundaries of the inguinal canal.

THURSDAY, *26th March* 1896.—10 *to* 12 *o'clock.*

1. Describe the origin, course, and distribution of the arteries which convey blood to the Large Intestine.

2. Describe the origin, course, and distribution of the Spinal Accessory Nerve.

3. Describe *A.*, the arrangement of the grey matter of the Cerebellum: *B.*, the distribution and form of the Nerve Cells in the superficial grey matter.

4. Give the steps of the dissection to expose the *Gluteus maximus*. Then reflect the muscle, and describe the arrangement and relations of the objects subjacent to it.

PHYSIOLOGY.

WEDNESDAY, *17th July* 1895.—1 *to* 3 *o'clock.*

1. (*a*) Describe the structure and arrangement of the pyramidal cells and their processes in the motor region of the cortex of the human cerebrum.

(*b*) State approximately, or draw a diagram showing the positions of the most definitely ascertained centres in the motor region of an ape's brain.

(*c*) State the evidence on which such localisation of function is based.

2. (*a*) Describe the visible changes that occur in the cells of the pancreas during rest and activity.

(*b*) Name the constituents of pancreatic juice, and briefly state their effects on the chyme.

(*c*) What effects follow complete excision of the gland in dogs?

3. (*a*) Describe the methods by which you would estimate the amount of haemoglobin, and the number of the corpuscular elements in a given sample of human blood.

(*b*) Describe the development of coloured blood corpuscles in the mesoblast of a chick, and the manner in which they are renewed in a mammal throughout adult life.

(*Aid your descriptions by sketches when desirable.*)

THURSDAY, 26*th March* 1896.—1 *to* 3 *o'clock.*

1. What are characters and causes of the normal Cardiac and Respiratory Sounds, and where are the several sounds heard most distinctly?

2. (*a*) Explain why the physical and physiological heat-values of a Carbo-hydrate are identical, while those of a Proteid differ.

(*b*) State the evidence regarding the seats of formation, and sources of Urea and Uric acid in mammals and birds.

3. (*a*) Describe the minute structure of the Spleen, and the mode of observing variations in the volume of the organ.

(*b*) What are the causes of its variations in volume, and what theories are entertainable regarding the functions of the organ, and on what grounds?

MATERIA MEDICA.

THURSDAY, 18*th July* 1895.—10 *to* 12 *o'clock.*

1. What are the chief chemical properties and therapeutic uses of *Permanganate of Potassium?*

2. Into what substance is *Salol* decomposed after its introduction into the alimentary canal? What are its therapeutic uses and doses?

3. Mention one chemical test for the identification of *Strychnine.* Describe its pharmacological action. What are its doses, and the doses of its liquid preparation?

4. What is the botanical source of Santonin? To what chemical group of active principles does it belong? State its therapeutic uses and doses.

5. Define *Lamella.* Mention the Lamellae that are officinal, and the therapeutic uses of each of them.

FRIDAY, 27*th March* 1896.—10 *to* 12 *o'clock.*

1. Describe the physical and sensible properties and Therapeutic uses of *Iodide of Potassium.* What are its doses?

2. State the sources, doses, pharmacological action, and therapeutic uses of *Salicylic acid.*

3. Describe the pharmacological action and therapeutic uses of *Oil of Turpentine.*

4. What is the pharmacological action of *Cantharides?* Explain why the poisonous symptoms of toxic doses are shown in connection with only certain organs and parts of the body. State its uses by internal administration, and the doses of the tincture.

5. What are *suppositories?* Mention four which are officinal, each with a different active ingredient, and the therapeutic uses of each of those mentioned.

PATHOLOGY.

THURSDAY, 18*th July* 1895.—1 *to* 3 *o'clock.*

1. *Pericarditis.* State the causes and varieties of pericarditis.

Describe the naked eye and microscopical characters in the acute stage of the common form. What effects may be produced by it—(*a*) in the pericardium; (*b*) in the heart?

2. *Pernicious Anæmia.* Describe the changes in the blood and in the organs of the body in this disease.

3. *Intussusception.* Mention the positions at which it may occur, and their relative frequency. Describe the effects produced in the bowel.

4. Give an account of the following parasites—

(1) Ankylostoma duodenale.

(2) Distoma haematobium (Bilharzia).
(3) Filaria Sanguinis hominis.
(4) Filaria (or Dracunculus) Medinensis, as regards (*a*) their characters when found in the body; (*b*) their life-history; (*c*) the changes which they produce.

For April Paper see under Third Professional Examination.

SECOND AND THIRD PROFESSIONAL EXAMINATIONS.

PATHOLOGY.

THURSDAY, *2nd April* 1896.—10 *to* 12 *o'clock.*

1. Describe the changes found in the Lung in Acute Lobar Pneumonia. What is known as to the causes of the disease?

2. Pernicious Anaemia. Describe the changes observed in the blood and in the viscera in this disease.

3. Give an account of the following parasites, and of their relations to disease:—Bilharzia Haematobia, Ankylostoma Duodenale, Filaria Sanguinis Hominis?

4. What changes are found in the Central Nervous System in Acute Tubercular Meningitis?

THIRD PROFESSIONAL EXAMINATION.

MEDICAL JURISPRUDENCE.

THURSDAY, *2nd April* 1896.—1 *to* 3 *o'clock.*

I.—*Hanging.*

1. What appearances are to be looked for in a case of suicidal hanging?

(*a*) External. (*b*) Internal. (*c*) What is found to have occurred in judicial hanging?

II.—*Carbolic Acid Poisoning.*

1. Describe the symptoms in detail. 2. What are the post-mortem appearances? 3. What is the treatment?

III.—*Starvation.*

What are the post-mortem appearances in death from this cause?

PUBLIC HEALTH.

THURSDAY, *2nd April* 1896.—1 *to* 3 *o'clock.*

I.—*Selection of Residence.*

1. A patient is desirous of taking a home at the sea-side for the benefit of his children, and he wishes you to help in his choice of a locality. State (*a*) the different sorts of data you would require to enable you to form a decision; (*b*) the steps you would take to obtain the data in question.

II.—*Milk Epidemics.*

In what way may milk be concerned in the causation of Epidemics?

Upon what evidence would you rely for tracing a given Epidemic to such cause?

III.—*Prophylaxis of Infectious Disease.*

In the event of the occurrence at different times of cases of (*a*) Typhus fever, (*b*) Smallpox, (*c*) Enteric fever, in a village unprovided with hospital accommodation, state in each instance the considerations which would chiefly influence you in advising persons how to avoid the existing infection.

FINAL PROFESSIONAL EXAMINATION.

PRACTICE OF PHYSIC.

MONDAY, *17th June* 1895.—10 *to* 12 *o'clock.*

(*Only* THREE *questions to be answered.*)

1. Enumerate and explain the chief indications which show that a case of Phthisis pulmonalis is approaching a fatal termination.

2. What diseases of the skin are due to animal parasites? Give the chief clinical features and the treatment of each,

with two prescriptions such as you would send to the druggist.

3. Give the morbid anatomy and clinical history of a case of Ulcerative Endocarditis, and indicate the treatment which you would adopt, with two prescriptions such as you would send to the druggist.

4. What do you understand by the term Uraemia? Give its causes, and the clinical features and treatment of its leading forms.

MEDICAL JURISPRUDENCE.

MONDAY, 17*th June* 1895.—1 *to* 3 *o'clock.*

I.—*Blood Stain.*

1. Describe the process for determining whether a stain (on a shirt) is blood or other colouring matter by the coagulation method.

II.—*Life Insurance.*

Proposer is a man aged 25.

Height is 5 feet 10 inches. Weight 10 stone.

No personal illness since diseases of childhood.

Nothing discovered by percussion or auscultation, except a slightly greater vocal resonance at right apex.

A sister at 28 "died after child-birth."

Parents and family otherwise healthy.

1. Judging by the above facts, what would be your opinion as to the insurability of proposer.

2. What further information would you require to enable you to form a full opinion?

III.—*Opium Poisoning.*

A man is not seen by a medical man till six or seven hours after he had swallowed two to three ounces of laudanum.

1. What symptoms would he then present?

2. How would you diagnose between cerebral hæmorrhage and opium poisoning?

PUBLIC HEALTH.

MONDAY, 17*th June* 1895.—1 *to* 3 *o'clock.*

I.—*Sewer Air.*

Describe and illustrate by rough diagrams means adequate for preventing the access of sewer or drain air to the interior of a dwelling-house by way of:—

(*a*) The waste pipe of a kitchen sink. (*b*) The water-closet soil pipe. (*c*) What effect, apart from the transmission of certain infectious diseases, would you expect to follow on the human subject from the habitual breathing of sewer air?

II.—*Milk Epidemics.*

Describe the manner in which milk may become an agency for spreading—

(*a*) Scarlet fever. (*b*) Enteric fever. (*c*) Diptheria.

III.—*Infection.*

(*a*) State the range of duration of the periods of incubation of each of the following diseases:—

1. Cholera. 2. Typhus fever. 3. Enteric fever. 4. Scarlet fever. 5. Smallpox. 6. Measles. 7. Diptheria. 8. Mumps.

(*b*) At what period in the course of convalescence from each of the above-named diseases would you regard a patient as free from infection?

SURGERY.

TUESDAY, 18*th June* 1895.—10 *to* 12 *o'clock.*

(*Only* THREE *Questions to be answered.*)

1. What are the Causes, Symptoms, Prognosis, and Treatment of Retropharyngeal abscess?

2. What forms of Ulceration may attack the Tongue? Give briefly the leading diagnostic features of each. Describe the operation of Excision of the Tongue (by Whitehead's method).

3. What dangers (local and general) arise from Burns?

What varieties of Burns are specially dangerous (locally and generally).

Describe the local treatment of a large recent Superficial Burn of the Thorax.

4. Name the diseases which attack the Prostate Gland.

State the main points which would enable you to make a diagnosis between the different varieties of Prostatic Disease.

MIDWIFERY.

TUESDAY, 18*th June* 1895.—1 *to* 3 *o'clock.*

(*All* THREE *Questions to be answered.*)

I.—*Placenta and the Third Stage of Labour.*

1. Indicate normal and abnormal sites of the Placenta.

2. Describe the structural relations of the Placenta to the Uterine Wall before Labour.

3. Describe the changes occurring during the Third Stage of Labour.

4. Describe the management of the Third Stage.

II.—*Relation of Fibroid Tumours of the Uterus to Pregnancy and Parturition.*

1. What influence may Uterine Fibroids have on Pregnancy?

2. How does their presence modify Prognosis during the First, Second, and Third Stages of Labour, and in the Puerperium?

3. What varieties of operative interference may be necessitated by their presence during Labour?

III.—*The Fallopia Tubes.*

1. Describe their form, situation, and relations.

2. Mention the chief Salpingeal inflammations, and give their symptoms and consequences.

CLINICAL MEDICINE.

Examinations, written, oral and practical, on cases in wards of the Royal Infirmary.

CLINICAL SURGERY.

Examinations, written and oral, on the Symptoms, Diagnosis, and treatment of Surgical Cases in the wards of the Royal Infirmary.

Fellowships, Scholarships, Bursaries, and Prizes in Medicine.

I.—FELLOWSHIPS.

I.—THE SYME SURGICAL FELLOWSHIP.

This Fellowship, of the annual value of £105, and tenable for two years, is open to competition among Bachelors of Medicine and Masters in Surgery of not more than three years' standing, who, in the opinion of the Examiners, have passed a creditable examination for these degrees, and presents the best Thesis on a Surgical subject giving evidence of original research, or practical talent, whether such Thesis be given in for Graduation or otherwise. The next award may be at the Graduation Ceremonial in August 1897. *See* Deed of Foundation, at p. 310 of CALENDAR for 1872-73.

1895. Not awarded.

II. THE GOODSIR MEMORIAL FELLOWSHIP.

This Fellowship was founded in 1872 by the subscribers to the fund for a memorial of the late Professor John Goodsir, and is for the encouragement of the study of Anatomy and Physiology. It is of the annual value of £100, tenable for two years, and is open to all Graduates in Medicine of the University of not more than three years' standing at the time of the competition, and to Licentiates of the Colleges of Physicians or Surgeons of Edinburgh of a like standing, who have attended within the University the same number of classes as are required for the Degree of M.B. It is awarded for the best Essay or Treatise containing results of original investigations in Anatomy, Human and Comparative, either Normal or Pathological, or in Experimental Physiology; Candidates may be examined *viva voce* or otherwise on the subject of their Essays or Treatises if the Examiners shall deem this desirable.

The next award may be made in August 1897, and competing Dissertations must be lodged with the Professor of Anatomy not later than the 30th April previously. *See* Deed of Foundation at p. 314 of CALENDAR for 1872-73.

III.—THE LECKIE-MACTIER FELLOWSHIP.

The Leckie-Mactier Fellowship, of the annual value of £80, is awarded to Bachelors of Medicine of not more than three years' standing, and is tenable for three years. The examinations comprise written reports and commentaries on medical, surgical, and gynecological cases in the University Wards in the Royal Infirmary, and written examinations in Midwifery, Medical Jurisprudence, and Public Health; also oral examinations in Medicine, Surgery, Midwifery,

Medical Jurisprudence, and Public Health. Every holder of the Fellowship must, before the expiry of his tenure, transmit to, and if required read publicly in presence of the Medical Faculty, a communication embodying the result of original observation or historical research in some department of medicine. Next appointment may be made in November 1898. *See* Deed of Foundation at p. 365 of CALENDAR for 1880-81.

1895. *Robert Hutchison, M.B., C.M.*

IV. FREELAND BARBOUR FELLOWSHIP.

This Fellowship is of the value of £100, and is open to award, in each alternate year, to the Bachelor of Medicine and Bachelor of Surgery who has gained the highest collective marks in Anatomy, Physiology, and Pathology in the Professional Examinations, and who is prepared to devote not less than one year to original research in Midwifery or diseases of women, in any of the Laboratories or Practical Departments of the University of Edinburgh. The next award will be made in July 1898. *See* Deed of Foundation at page 517 of CALENDAR for 1889-90.

1894. *Robert Ward Briggs, M.B., C.M.*

THE WILLIAM DICKSON TRAVELLING FUND.

This is a fund for the purpose of assisting Graduates of any Faculty, of not more than three years' standing, to travel for the purpose of study or research. For particulars, see page 356.

THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is in the patronage of the Trustees of the British Museum, is of the annual value of £144, and is open to Graduates in any of the Faculties of this University who have obtained their Degrees after Examination. For further particulars, see page 468.

II.—SCHOLARSHIPS.

I.—ETTLES SCHOLARSHIP IN MEDICINE.

This Scholarship was founded in 1868 by Miss Mary Ettles of Inverness, and is of the annual value of about £35. It is awarded annually to the Bachelor of Medicine and Master in Surgery of the University of Edinburgh, whom the Faculty of Medicine may consider the most distinguished of that year. *See* Deed of Foundation, at page 242 of CALENDAR for 1868-69.

1895. *Joseph Edward Bowes, M.B., C.M.*

II.—SIBBALD MEDICAL SCHOLARSHIP.

This Scholarship is of the annual value of £40. *First,* The Scholarship is bestowed on, and held by, a Student in the Faculty of Medicine in the University of Edinburgh, *who does not hold any*

other Scholarship or Bursary, and is tenable for three years, during each year the Scholar must complete an *Annus Medicus* required from Candidates for the degree of Bachelor of Medicine. *Second*, It is bestowed upon the Student obtaining the highest place by Competitive Examination, and is open to all Candidates who have not previously been Students of Medicine in any other School or University, and who have attended Medical Classes in the University of Edinburgh, for *not less* than one Winter and one Summer Session, and for *not more* than one Winter and two Summer Sessions. The Competitive Examination is in Chemistry, Botany, Natural History, and Physics, and is conducted in such manner as the Senatus Academicus may, in concurrence with the Trustees, prescribe. The next competition may take place in October 1897. Application to be made to Messrs Mackenzie, Innes & Logan, W.S., 23 Queen Street, Edinburgh.

1894. *D. B. Waters.*

III.—THOMSON SCHOLARSHIP.

The Thomson Scholarship, value £40, tenable for four years, open to matriculated students commencing their first Winter Session in Medicine. The examination is on Botany, Zoology, and Elementary Mechanics. The Scholarship is awarded to the candidate who shall obtain the highest number of marks in the examination. The Trustees, however, reserve power to themselves to withhold the appointment should none of the candidates obtain a sufficiently high percentage of the marks in the examination. Candidates must send in their names to the agents for the Trust before the first day of October in the year in which there is a competition for the Scholarship. Students of the name of Thomson or Traquair, or those who are natives of the town or county of Dumfries, or of the city of Edinburgh, have a preference. The next appointment may be made in October 1898. For other particulars, application to be made to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, Edinburgh.

1894. *James Masson.*

IV.—COLDSTREAM MEMORIAL MEDICAL MISSIONARY SCHOLARSHIP.

The Coldstream Memorial Medical Missionary Scholarship was founded in memory of the deceased John Coldstream, M.D., F.R.C.P.E. Value £25, and tenable for five years. The holder must be a first year's Medical Student, who intends to devote himself to the life of a Medical Missionary at home or abroad. He must be approved of by the awarders, and pass the preliminary examination before beginning his studies. Next award in 1896. A preference is given to students connected with the Edinburgh Medical Missionary Society. A full copy of the conditions can be had on applying to John P. Coldstream, W.S., care of Messrs Mill, Bonar & Hunter, W.S., 15 Hill Street, Edinburgh. *See* Conditions in Calendar for 1879-80, p. 357.

1891. *James Hunter White.*

V.-XI.—VANS DUNLOP SCHOLARSHIPS.

Seven Scholarships, of £100 each, tenable for three years. Not more than one at a time can be held by the same person. The successful candidates for each of these Scholarships will be required to continue their medical studies in this University during their tenure of their Scholarships, and to graduate as M.B. and Ch.B. *See* Excerpt from Will of Dr Vans Dunlop, p. 380 of CALENDAR for 1880-81.

V. *One* is awarded to the Candidate who, at either the March or the preceding October Medical Preliminary Examination, has obtained the highest number of marks in the Subjects required to enable him to appear for a Professional Examination, provided (1) that he has not already passed the said Preliminary Examination; and (2) that, in the event of his having passed an equivalent examination and presenting himself for the Medical Preliminary Examination, he shall waive all right to admission to the Faculty of Medicine except through the ordinary Medical Preliminary Examination of this University. The next award may be made in March 1899.

1896. *James G. S. Jamieson* }
,, *Andrew Hunter* } equal.

VI. *One* is awarded at the end of the First Winter of Medical Study to the Student who, after having attended for the first time within the University a Systematic Course of Lectures on each of the subjects of Chemistry, Anatomy, and Physics, and who has not previously attended any course in Chemistry, or Anatomy, or Physics, which qualifies for Degrees in Medicine, or for a Licence in Medicine or Surgery, shall obtain the highest number of marks in an Examination in these subjects, specially conducted for the purpose. The Subjects of Examination in Anatomy will include the Skeleton; Joints; Muscular System; Heart and Great Vessels; General Arrangement of the Nervous System; Position of the Thoracic and Abdominal Viscera. The next award may be made at the end of March 1899.

1896. *George H. Hanna* }
,, *Aleck. Trotter* } equal.

VII. *One* is awarded at the end of the first Summer Session of Medical Study to the Student who, after having attended for the first time within this University a Systematic Course of Lectures on each of the subjects of Botany and Zoology, and who has not previously attended any course in Botany or Zoology which qualifies for Degrees in Medicine, or for a Licence in Medicine or Surgery, shall obtain the highest number of marks in an Examination in these subjects specially conducted for the purpose. The next award may be made at the end of July 1899.

VIII. *One* is awarded at the end of the Second Winter of Medical Study to the Student who, after having attended within the University

for the first time a Systematic Course in each of the subjects of Physiology and Surgery, and who has not previously attended a Course of Physiology or Surgery which qualifies for Degrees in Medicine, or for a Licence in Medicine or Surgery, shall obtain the highest number of marks in an Examination in the subjects specially conducted for the purpose. The Subjects of the Examination in Physiology will embrace the Histology and Physiology of the Simple Tissues, and of the Organs concerned in Nutrition. The whole subject of Nutrition will be included, and also Animal Heat. The next award may be made at the end of March 1899.

1896. *William John Barclay.*

IX. *One* at the beginning of the Fourth Winter Session of Medical Study to the Student who, after having attended within the University the Systematic and Practical Instruction in the subjects of Anatomy and Physiology, and, having passed the Second Professional Examination, shall obtain the highest number of marks in an Examination in the subjects specially conducted for this purpose. The successful Candidate will be required to continue his studies in this University during the first two years of his tenure of the Scholarship, and at the end of the second year to graduate as M.B. and Ch.B.; and during the remaining year to prosecute original investigation in one or other of the Research Laboratories in the Faculty of Medicine. Examination on 7th October at 9 A.M. Names to be entered before 28th September.

X. *One* at the beginning of the Fourth Winter Session of Medical Study to the Student who, after having attended within the University a Systematic Course in the Subject of Materia Medica (including Pharmacology), and, having passed the Second Professional Examination, shall obtain the highest number of marks in an Examination in that subject specially conducted for the purpose. The successful Candidate will be required to continue his studies in this University during at least two years of his tenure of the Scholarship, and at the end of the second year to graduate as M.B. and Ch.B.; and during the remainder of his tenure of the Scholarship to devote himself to original investigation in the Materia Medica Laboratory in the Faculty of Medicine. Examination on 7th October at 9 A.M. Names to be entered before 28th September.

XI. *One* to be awarded at the beginning of the Fifth Winter Session of Medical Study, to the Student who, after having attended within the University the Systematic and Practical Courses in Pathology, and the Systematic Courses in Medical Jurisprudence and Public Health, and having passed the third Professional Examination, shall obtain the highest number of marks in an Examination in these subjects specially conducted for the purpose. The successful Candidate will be required to continue his studies and graduate as M.B. and Ch.B. in this University, during the first year of his tenure of the Scholarship, and to devote himself during the remainder of his tenure to original investigation in one or other of the Research Laboratories in the Faculty of Medicine.

Examination on 7th October at 9 A.M. Names to be entered before 28th September.

XII.—THE MURCHISON MEMORIAL SCHOLARSHIP.

This Scholarship consists of the annual proceeds of about £1000, awarded in alternate years in London and Edinburgh, for proficiency in Clinical Medicine. Candidates must be registered medical students who have attended for not less than four nor more than six years at Hospitals and Classes at Edinburgh or London, recognised by the University of Edinburgh or the Royal College of Physicians of London. The competition in 1897 will be held in Edinburgh.

1895. *Neil Macvicar, M.B., C.M.*

XIII.—STARK SCHOLARSHIP IN CLINICAL MEDICINE.

This Scholarship of £112, less expenses, and tenable for one year, is for the encouragement of the study of Clinical Medicine. It is open to competition among all matriculated students of the University who are or have been in attendance at the University Class of Clinical Medicine, and to Bachelors of Medicine of the University of not more than eighteen months' standing who have attended this class. It is open every second year alternately with the competition in Edinburgh for the Murchison Memorial Scholarship. The Examination, oral and in writing, includes (*a*) Examination of Patients; (*b*) Questions on Therapeutics and Pathology; (*c*) Examination of Specimens. Each holder of the Scholarship is required to devote his time in the wards of the Professors of Clinical Medicine to original investigation or other work directly connected with Clinical Medicine; to report his proceedings every three months to the Professors of Clinical Medicine; and, within a reasonable time after the expiry of his tenure of the Scholarship, to present to the Faculty of Medicine a written statement of the results of his investigations or other work. It cannot be held along with any other Fellowship, Scholarship, or Bursary in a Scottish University. The next Competition will take place in July 1898. *See* Deed of Foundation at p. 427 of CALENDAR for 1884-85.

1894. *Robert Hutchison, M.B., C.M.*

XIV.—BUCHANAN SCHOLARSHIP.

This Scholarship, of the value of about £40, 10s., founded by Mrs Jane Jack or Buchanan, Moray Place, Edinburgh, is awarded annually to the Graduate in Medicine of the year who has shown the highest proficiency in Midwifery and Gynecology, as evidenced in (1) the Class Examinations of Midwifery and Diseases of Women and Children; (2) the Records kept by him of cases treated in the Gynecological Section of the University Class of Clinical Medicine in the Buchanan Ward of the Royal Infirmary, and (3) the Final Examination

in Medicine for the Degree of M.B. The Scholar is required to act as non-resident Clinical Clerk in the University Gynecological Ward, and to give assistance in the Examination of Class Exercises. *See* Deed of Foundation, p. 707 of CALENDAR for 1894-95.

1895. *Walter William Chipman, M.B., C.M.*

XV.—THE JAMES SCOTT SCHOLARSHIP.

This Scholarship, founded by Mrs Mary Ann Scott or Thomson of Hawick, of the value of £42, 10s., is awarded annually at the Graduation Ceremonial in Medicine in August for proficiency in Midwifery. The award is based upon the results of the Competitive Examinations in the Class of Midwifery, upon the character of the records of Cases of Midwifery attended by the Candidate at the Royal Maternity and Simpson Memorial Hospital, and upon the position obtained by him at the Final Examination for Degrees in Medicine. The Scholarship is for one year, but may, in special circumstances, be continued for another year. *See* Deed of Foundation, p. 410 of CALENDAR for 1883-84.

1895. *David James Graham, M.B., C.M.*

XVI., XVII.—HOPE PRIZE SCHOLARSHIPS.

Two Hope Prize Scholarships in Chemistry, each of the annual value of about £30. For particulars, *see* under Scholarships in Science.

XVIII.—THE MOUAT SCHOLARSHIP IN THE PRACTICE OF PHYSICS.

This Scholarship, which will consist of the annual proceeds of about £1500 given by Frederick John Mouat, M.D., of the Local Government Board, London, formerly Professor of Medical Jurisprudence in the University of Calcutta, has been founded in connection with the class of Practice of Physic, but is not to be open for competition until the death of two liferenters.

XIX.—MACKAY SMITH SCHOLARSHIP IN CHEMISTRY.

This Scholarship is of the annual value of £25, tenable for two years, and is open for competition to Students who have attended the Class of Chemistry in this University. The successful Candidate is bound to attend the Class of Chemistry, or to prosecute the study of Chemistry in the University during at least one year of his tenure of the Scholarship, in such way as the Senatus Academicus may direct or approve. The next Examination will take place in March 1898.

1896. *J. H. H. Pirie.*

XX.-XXIII.—CRICHTON SCHOLARSHIPS FOR RESEARCH.

Four Scholarships, each of the value of £100, tenable for one year, with power of re-appointment for a second and for a third year, are open in rotation in the subjects of Anatomy, Physiology, Materia

Medica, and Pathology, for the prosecution of Research by Graduates who have been Students of this University for not less than four years. The Scholarships in Materia Medica and Pathology may be open in October 1896. Candidates are required to submit a sufficient description of the work they propose to undertake to the Dean of the Faculty of Medicine on or before 1st September. The Examination is both written and practical, bearing on Research Work. See Regulations, page 750 of CALENDAR for 1895-96.

1895. *John B. Yeoman, M.B., C.M.* (Anatomy).
1896. *T. H. Milroy, M.B., C.M., D.Sc.* (Physiology).

III.—BURSARIES.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1864	Dr Abercrombie, Cape Town.	£20 0 0	1	4	£20 0 0	Governors of George Heriot's Trust.
II.	1871	Dr J. R. Sibbald's Trustees.	About £150 0 0	5	3	30 0 0	Trustees of Dr J. R. Sibbald.
III.	1873	Dr Mackie's Trustees.	60 0 0	2	2	30 0 0	Professors of Fac. of Med. in Univ., Edin.
IV.	1873	Mr Grierson of Ogscastle's Trustees.	60 0 0 20 0 0	3 1 1	3 2 1	20 0 0 10 0 0 10 0 0	Senatus.
V.	1878	Dr Andrew Thomson	200 0 0	8	4	25 0 0	Trus. of Dr Thomson.
VI.	1878	William Mackenzie	42 10 0	2	1	20 0 0	Senatus.
VII.	1878	John Aitken Carlyle	56 0 0	2	1	28 0 0	Senatus.
VIII.	1882	Mrs Ronald of Liverpool	80 0 0	2		About 40 0 0	Senatus.
IX.	16—	George Heriot. Remodelled 1887	480 0 0 About	6	4	30 0 0	Governors of George Heriot's Trust.
X.	1890	Major Robert Orr Crichton of Lynn, M.D.	500 0 0	10	4	50 0 0	Senatus Academicus.
XI.	1809	Dr Donald Grant, London.	180 0 0 About	2	4	90 0 0 About	Dr Grant's Trustees.
XII.	1846	John Jamieson, Edinburgh.	26 0 0	1	4	26 0 0	Principal and Two Professors.
XIII.	1883	Wm. Renton, Edinburgh.	19 19 6	1	1	19 19 6	Professors of Mathematics, Natural Philosophy, Chemistry, and Political Economy.
XIV.	1886	Richard Allan, Feuar, Kelso.	90 0 0	3	3	About 30 0 0	Trustees of R. Allan.
XV.	1889	Daniel Maclaurin, London.	70 0 0	1	4	70 0 0	Town Council.

I. *Abercrombie Bursary*—Open by competition, in the event of more than one candidate coming forward, to Students who have been brought up in Heriot's Hospital, and have finished their course as Heriot Bursars, to aid them in further

prosecution of their studies for any of the learned professions. Students in th Faculty of Medicine to be always preferred. Candidates are referred to th Treasurer of the Heriot Trust, 20 York Place, Edinburgh, before 15th September

II. *Sibbald Bursaries.*—These Bursaries, each tenable for three years, ar available to Students in the Faculty of Arts, Medicine, Law, or Divinity entering the University who have not previously attended any University in th United Kingdom or elsewhere, *and who do not hold any other Bursary o Scholarship*, but no objection to a Candidate that he has, during the previou Summer Session, attended any of the Classes in the University of Edinburgh required by the Faculties of Medicine or Law. The examination is the same a the Preliminary and Bursary Examination in the Faculty of Arts at the commenc ment of each Winter Session. Application to be made to Messrs Mackenzi Innes & Logan, W.S., 25 Queen Street, Edinburgh, before 15th September.

III. *Mackie Bursaries.*—These Bursaries are awarded to Students of Medicin of the University, one of which is open to Students who have completed thei First Annus Medicus, and the other to Students who have completed their Secon Annus Medicus, and who are, in the opinion of the Faculty of Medicine, in suc pecuniary circumstances as to require assistance. In the event of no appointmen having been made to either Bursary on any occasion when it is vacant, th Senatus may, on the recommendation of the Faculty of Medicine, appoint an Candidate to the vacant Bursary who has completed either his first or his secon *Annus Medicus* and who otherwise satisfies the requirements of tenure. *Bursar* —1894, *G. H. W. Robertson, M.A.*; 1895. *J. W. Campbell* (for one year).

IV. *Grierson Bursaries.*—Candidates from the parishes of Crawford or Lead hills, about to commence their Medical Curriculum, who have passed in th University of Edinburgh a satisfactory examination in the preliminary subject required by the Regulations for Graduation in Medicine, who have been diliger students, and who require pecuniary aid to enable them to pursue their studies have a preference. In the case of more candidates than one, the Bursary will b awarded to the best qualified, on examination in the subjects above referred to.

Failing the appointment of preferential candidates, the Bursary will be tenabl for periods of one year only, in manner following, viz. :—*One* will be awarde to the student who, not having completed his twenty-first year, shall pass th best examination in the subjects of the preliminary examination, provided (1) tha he has not already passed the said preliminary examination ; and (2) that, i the event of his having passed an equivalent examination and presenting himse for the Medical Preliminary Examination, he shall waive all right to admissio to the Faculty of Medicine except through the ordinary Medical Preliminar Examination of this University. *One* will be awarded by competitive examina tion to the student beginning the Second Winter Session, who having alread passed the Preliminary Examination required for Graduation in Medicine, sha pass the best examination in the subjects of Chemistry, Botany, Natural History and Physics. *One* will be awarded by competitive examination to the studer beginning the Third Winter Session who, having already passed the First Pro fessional Examination, shall pass the best examination in the subjects of Anatom and Physiology. *One* will be awarded by competitive examination in Materi Medica at the beginning of the Fourth Winter Session. *One* will be awarded b

competitive examination in Pathology at the beginning of the Fifth Winter Session. *Bursars*—1895, *first year, John P. Campbell; second year, Robert N. Rowe; third year, R. F. M'Nair Scott; fourth year, W. Morrison Milne.*

V. One *Thomson Bursary* is awarded at each of the Preliminary Examinations held in Spring and Autumn, to the Candidate who, being about to commence his Curriculum, takes the highest place in the Medical Preliminary Examination: provided (1) that he has not already passed the said Preliminary Examination; and (2) that, in the event of his having passed an equivalent examination and presenting himself for the Medical Preliminary Examination, he shall waive all right to admission to the Faculty of Medicine except through the ordinary Medical Preliminary Examination of this University. Students of the name of Thomson or Traquair, or those who are natives of the town or county of Dumfries, or of the city of Edinburgh, have a preference. Candidates claiming a preference must intimate their names to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, Edinburgh, the agents for the Trust (from whom further particulars may be obtained), before 15th September 1896 and 21st March 1897 for the Examinations in Autumn and Spring respectively. *Bursars*—1895-96, *James G. S. Jamieson; Robert V. Clark.*

VI. *Mackenzie Bursaries*, open to Students of Anatomy Classes, of any year, who shall display the greatest industry and skill in Practical Anatomy during the Winter Session. *See* CALENDAR for 1879-80, p. 353. *Bursars*—1896, *J. A. Black* and *L. W. Wedderburn*—equal; *Yoshinobu Fukuda* and *T. C. Mackenzie*—equal.

VII. *John Aitken Carlyle Bursaries*, one is awarded at the end of every Winter Session to a first year Student for proficiency shown in the ordinary class examinations in Anatomy and Chemistry, the other to a second year's Student for proficiency shown in the ordinary class examinations in Anatomy and Physiology. *See* CALENDAR for 1879-80, p. 350. *Bursars*—1896, Senior, *Charles Chilton;* Junior, *S. A. Ballantyne.*

VIII. The *Anderson Bursaries* have been founded by Mrs Ronald of Liverpool, and will come into operation on the death of an annuitant. For Deed of Foundation, *see* CALENDAR 1882-83, p. 396.

IX. The *Heriot Bursaries* are for Students unconnected with the Hospital, entering upon a regular Curriculum with a view to graduation. For remodelled scheme, see CALENDAR, 1887-88, p. 498. For subjects of Examination, &c., see under Bursaries open in Faculty of Arts.

X. *Crichton Bursaries.*—Two of these Bursaries are open annually—one in Autumn and one in Spring—to Students entering the Faculty of Medicine of this University. The subjects of Examination are Latin, Greek, French, German, Mathematics, Logic, and Moral Philosophy. Each Bursary is of the annual value of £50, tenable for four years, provided the Bursars continue Students of the Medical Faculty of this University. *See* Excerpt from Deed, p. 540 of CALENDAR for 1891-92, and Regulations, p. 749 of CALENDAR, for 1895-96.

XI. The *Grant Mortification* is for Students of the University of Edinburgh, of the name of Grant. The holders may attend the Arts, Medical, Divinity, or Law Classes. Application for information may be made to Messrs Mackenzie, Innes & Logan, W.S., 23 Queen Street, Edinburgh.

XII. The *Jamieson Bursary* is for the benefit of the sons of schoolmasters, farmers, mechanics, and labourers, and other persons born and residing within any one of the following parishes—viz., Crawfordjohn, Crawford, united parishes of Lamington and Wandell, united parishes of Wiston and Roberton, Culter and Biggar. The Bursar may attend Classes in any of the Faculties.

XIII. The *Renton Bursary*, founded by the late William Renton, 20 Royal Terrace, Edinburgh, is for a Student pursuing his studies in the classes of Natural Philosophy, Mathematics, Chemistry, and Political Economy, or such of them as he may consider proper, and who may require assistance. The Bursary is tenable for one year, and cannot be held by any one under the age of sixteen or above twenty-one. It is filled up annually in October.

XIV. *Allan Bursaries.*—These Bursaries are available to Students attending classes in any of the Faculties of Arts, Science, Medicine, or Law, in the University of Edinburgh, and are tenable for three years or for such part of that period as the Bursar shall remain a Student at the University. In nominating Candidates for presentation to the Bursaries, care will be given to prefer such as have been born in the parish of Kelso, provided they are qualified by their previous education for entering the University. Apply to P. Stormonth Darling, Esq., writer, Kelso.

XV. *Maclaurin Bursary.* This Bursary, tenable for four years, is by the will of the founder to be called the "Maclaurin Bursary," and is restricted to Students of the Founder's name of Maclaurin (or in Gaelic orthography "Maclalhrin"). It may be held in any of the Faculties. *See* Deed of Foundation, p. 544 of CALENDAR for 1890-91.

IV.—PRIZES.

I.—NEIL ARNOTT PRIZE FOR EXPERIMENTAL PHYSICS.

This Prize, of the value of about £42, presented to the University by Dr Neil Arnott of London, is awarded annually in October to the Candidate who shall pass with the greatest distinction the Ordinary Examination in Natural Philosophy for the Degree of M.A. Candidates must have been Students of Medicine of this University during either a summer or a winter session; and the successful candidate must continue a Student of Medicine at this University during the next Winter Session, failing which, the prize will be forfeited and assigned to the competitor next in merit. No student can appear for examination after the completion of his third *annus medicus;* and no candidate shall be allowed to offer himself more than once.

In the event of a competitor, qualified as above, not coming forward, the prize will be awarded to a Candidate for a Degree in Arts who shall pass with most distinction the ordinary examination in Natural Philosophy. *See* Deed of Foundation at p. 274 of CALENDAR for 1870-71.

1895. *Joseph Edward Bowes, M.B., C.M.*

II.—THE ROBERT WILSON MEMORIAL PRIZE.

This Prize was founded by John Wilson of South Bantaskine, in memory of his son, Robert Wilson, and is of the value of £8, 16s. 2d. It is annually awarded at the close of the Winter Session to the student in the senior Chemistry Class who takes the highest honours. *See* Deed of Foundation at p. 351 of CALENDAR for 1876-77.

1896. *Allan W. C. Menzies. Prox. access., Charles E. Fawsitt.*

III.—THE ELLIS PRIZE FOR PHYSIOLOGY.

This Prize consists of the proceeds of a sum of £500 bequeathed by the late Daniel Ellis, Esq., to the Principal and Faculty of Medicine of the University of Edinburgh, accumulated for three or five years. Value about £25 per annum. It is awarded for the best Essay or Treatise on some subject of Animal or Vegetable Physiology proposed by the Faculty for competition to Students or Graduates of not more than five years' standing. The next award may be made in 1896. Subject—"The Functions of Wood." Essays in Competition to be lodged with the Dean of the Faculty of Medicine on or before 30th April 1897.

IV.—PRIZES FOR THESES.

Gold Medals, each of the value of £10, are awarded annually on the day of graduation to Doctors of Medicine whose Theses are deemed worthy of that honour.

V.—THE GOODSIR MEMORIAL PRIZE.

(*Now the Goodsir Memorial Fellowship.*)

This Prize was founded in 1872 by the subscribers to the fund for a memorial of the late Professor John Goodsir. It is in the patronage of the Principal, Dean of the Faculty of Medicine, and Presidents of the Royal Colleges of Physicians and Surgeons of Edinburgh, and is for the encouragement of the study of Anatomy and Physiology. It is given triennially, and is of the value of £60. It is open to all Graduates in Medicine of the University of not more than three years' standing at the time of the competition, and to Licentiates of the Colleges of Physicians or Surgeons of Edinburgh of a like standing, who have attended within the University the same number of classes as are required for the Degree of M.B. The Prize is awarded for the best Essay containing results of original investigations in Anatomy, Human and Comparative, either Normal, or Pathological, or in Experimental Physiology. *See* Deed of Foundation at p. 314 of CALENDAR for 1872-73.

1895. *Gustav Mann, M.D.*

VI.—THE WIGHTMAN PRIZE IN CLINICAL MEDICINE.

This Prize of £12 was founded by Mrs E. Wightman, in memory of her son, J. T. Wightman, M.B., C.M., and is annually awarded at the close of the Summer Session to the student attending the Class

of Clinical Medicine for the best Dissertation on any subject presented by the Faculty of Medicine, or for the best Report and Commentary on cases which have during the previous Winter and Summer Sessions been treated in the University Clinical Wards in the Royal Infirmary. Three months' notice of subject is given by the Faculty of Medicine. *See* Deed of Foundation at p. 348 of CALENDAR for 1876-77.

The Prize, which is open to members of the Clinical Class of either Winter 1896 97 or Summer 1897, will be awarded for the best report and commentary on cases. The Essays to be given in before 6th July.

1895. Not awarded.

VII.—THE BEANEY PRIZE.

This Prize of £35 was founded in 1878 by James George Beaney, Esq. of Melbourne. It is awarded at the Graduation Ceremonial in Medicine to the Graduate in Medicine and Surgery of the year who, having attended within the University courses on Anatomy, Surgery, and Clinical Surgery qualifying for Graduation, obtains the highest number of marks during his examinations in these subjects for the Degrees of Bachelor of Medicine and Master in Surgery. The Senatus has the power of withholding the Prize in the event of no Student passing the above examinations with sufficient merit. *See* Deed of Foundation at p. 371 of CALENDAR for 1878-9.

1895. *W. J. Garbutt, M.B., C.M.*

VIII.—THE CAMERON PRIZE.

This Prize was founded in 1878 by the late Dr Andrew Robertson Cameron, of Richmond, New South Wales. It consisted of the annual proceeds of a sum of £2000, to be given annually "to the practitioner or member of the medical profession who shall be adjudged to have made the most valuable addition to Practical Therapeutics during the year preceding, and in determining such question, the word Therapeutics shall be taken in its widest sense as including every agent, or agency capable of influencing the human body in the maintenance or improvement of health, avoidance or cure of diseases, or the alleviation of suffering."

The regulations have been remodelled by the Educational Endowments (Scotland) Commission, and the annual proceeds, which, after defraying the necessary expenses, amount to about £80, may be awarded annually to a person who in the course of the five years immediately preceding has made any highly important and valuable addition to Practical Therapeutics. The Prizeman is required to deliver a lecture or course of lectures on the addition to Practical Therapeutics so made by him, or to publish an account of such addition in such manner as the Senatus may prescribe. The prize will not be awarded if, in the opinion of the Senatus, no addition to Practical Therapeutics has been made within the said period of five years of sufficient importance and value to justify the awarding of the prize.

The prize is awarded annually at the Graduation Ceremonial in August. *See* Remodelled Regulations, p. 497 of CALENDAR for 1888-89.

1895. *Professor Behring.*

IX.—THE DOBBIE SMITH PRIZE IN BOTANY.

This prize, which consists of a Gold Medal, is open to competition each alternate year to all Matriculated Students of the year of the award, for an Essay on a Botanical subject. The subject of the next competition is an original investigation "On the Structure, Development, and Life History of any British Flowering Plant;" and the memoir is to be accompanied with a series of illustrative specimens. Competing Essays to be sent to the Dean of the Faculty of Medicine on or before the 1st of July 1897. The prize will be awarded to the successful competitor at the Graduation Ceremony of August 1897.

X.-XX.—THE GUNNING VICTORIA JUBILEE PRIZES.

Dr Gunning, of Edinburgh and Rio de Janeiro, has founded Eleven Post-Graduation Prizes of the value of £50 each, viz.:—(1) The Monro prize for Anatomy; (2) The Bell prize for Physiology; (3) The Edward Forbes prize for Zoology, &c.; (4) The Hutton Balfour prize for Botany; (5) The Joseph Black prize for Chemistry; (6) The Christison prize for Materia Medica; (7) The Lister prize for Surgery; (8) The Gregory prize for Practice of Physic; (9) The John Thomson prize for Pathology; (10) The Simpson prize for Obstetrics; (11) The Alison prize for Medical Jurisprudence and Public Health. Candidates must be either Bachelors of Medicine or Bachelors of Science of this University of not more than three years' standing. The prizes will be awarded with the approval of the Senatus for (1st) either (*a*) Competitive Essays written specially for the prizes, or (*b*) Theses submitted for Graduation; or (2nd) for original research conducted under supervision of the Professor in the department in which the prize is awarded. Two prizes will be awarded annually in the following rotation, viz.:—Practice of Physic, Physiology, Botany, Surgery, Pathology, Zoology, Materia Medica, Obstetrics, Public Health and Medical Jurisprudence, Anatomy, and Chemistry. Competitive Essays are required to be lodged with the Dean of the Faculty of Medicine on or before 30th April of the year in which each prize is to be awarded, and the successful competitors will be announced annually at the Graduation Ceremonial in Medicine.

1895. *Andrew Walker, M.A., B.Sc., M.B., C.M.* (Obstetrics).

1895. *George Newman, M.D.* (Public Health)

„ *J. D. F. Gilchrist, B.Sc.* (Zoology)

XXI.—ANDERSON HENRY PRIZE.

The Prize was founded by Isaac Anderson Henry of Woodend, and consists of the proceeds of a sum of £300 accumulated for three years.

It is awarded for the best and approved essay on a botanical subject proposed by the Professor of Botany, the Curator of the Royal Botanic Garden, and the President of the Botanical Society of Edinburgh, for competition to students in the Class of Botany in the University of Edinburgh, during any of the three years preceding the date of the award. The next award may be made in August 1898. Competing Essays to be sent to the Dean of the Faculty of Medicine on or before 1st July 1898.

XXII.—MILNER FOTHERGILL MEDAL IN THERAPEUTICS.

This Medal, of the value of about £20, is awarded biennially. It is open for competition to Graduates in Medicine of the University, who have been members of the Class of Materia Medica in the University, for the best essay which shall include a description of original research made by the Candidate on a Pharmacological or Therapeutic subject, preference being given to a subject relating to Dietetics. *See* Deed of Foundation, p. 542 of CALENDAR for 1891-92. The next award may be made at the Graduation Ceremonial in August 1897. Essays to be lodged with the Professor of Materia Medica on or before 30th April 1897.

1895. *Edward Moody Smith, M.D.*

XXIII.—PATTISON PRIZE IN CLINICAL SURGERY.

This Prize of about £11, 17s. 6d., is awarded annually to the Student of the University Class of Clinical Surgery who shall write the best Report and Commentary on cases treated in the University Surgical Wards during the Academic Year. The Essays to be given in before 6th July.

FELLOWSHIPS, SCHOLARSHIPS, BURSARIES, AND PRIZES OPEN TO COMPETITION IN THE FACULTY OF MEDICINE IN 1896-97.[1]

For further information, and for information regarding other Scholarships, Fellowships, Bursaries, and Prizes, see above, where full information regarding the conditions of tenure and the values are given.

FELLOWSHIPS.

1. *The Syme Surgical Fellowship* (No. I., p. 682), of the annual value of about £105.

2. *The Goodsir Memorial Fellowship* (No. II., p. 682), of the annual value of about £100.

SCHOLARSHIPS.

The Vans Dunlop Scholarships, each of the value of £100, and tenable for three years. Not more than one of these Scholarships can be held by the same person at one time.

1. *One* for Anatomy and Physiology (No. IX., p. 686).

[1] *N.B.*—The values of the Fellowships, Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise or fall of the rate of interest, &c

2. *One* for Materia Medica (including Pharmacology) (No. X., p. 686).
3. *One* for Pathology, and Medical Jurisprudence and Public Health (No. XI., p. 686).
4. *The Murchison Memorial Scholarship* (No. XII., p. 687).
5. *The Buchanan Scholarship* (No. XIV., p. 687).
6. *The James Scott Scholarship* (No. XV., p. 688).
7. *The Ettles Scholarship in Medicine* (No. I., p. 683).
8, 9. *Two Hope Prize Scholarships* (No. XVI., p. 688).

10, 11. *Two Crichton Scholarships for Research* may be offered in October—*one* in Materia Medica and *one* in Pathology. Candidates are required to intimate their names, and to give a sufficient description of the Research work they propose to undertake, to the Dean of the Faculty of Medicine on or before 1st September. The Examinations are both written and practical. The date of the Examinations will be afterwards announced. (No. XX., p. 688).

12. *The Coldstream Memorial Medical Missionary Scholarship* (No. IV., p. 684).

BURSARIES.

1, 2. *Two Sibbald Bursaries* (No. II., pp. 689 and 690).
3, 4. *Two Thomson Bursaries* (No. V., pp. 689, 691).
5-9. *Five Grierson Bursaries* (No. IV., pp. 689, 690). *One* for subjects of the Preliminary Examination; *one* in Chemistry, Botany, Natural History, and Physics; *one* in Anatomy and Physiology; *one* in Materia Medica, and *one* in Pathology. The competition for the Second, Third, and Fourth year Bursaries will begin on 7th October at 9 A.M. Names of Candidates to be entered on or before 18th September.
10, 11. *Two John Aitken Carlyle Bursaries* (No. VII., pp. 689, 691).
12, 13. *Two Mackenzie Bursaries* (No. VI., pp. 689, 691).
14. *Renton Bursary* (No. XIII., pp. 689, 692).
15. *Two Mackie Bursaries* (No. III., pp. 689, 690). Awards may be made at the beginning of the Winter Session, 1896-7. Applications to be made to the Dean of the Faculty of Medicine on or before the 1st October 1896.
16, 17. *Two Crichton Bursaries* (No. X., pp. 689, 691).

Competitors for the above Fellowships, Scholarships, and Bursaries, excepting those awarded for the subjects of Preliminary Examination, must have studied the subjects of Examination at the University of Edinburgh. No Fellowship, Scholarship, or Bursary, with the exception of the Ettles Scholarship, can be held along with any other Fellowship, Scholarship, or Bursary.

PRIZES.

The Medical Faculty Medals.—Gold Medals are given on the day of Graduation to Doctors of Medicine whose Theses are deemed worthy of that honour.

1. *The Neil Arnott Prize* (No. I. p. 692).
2. *The Beaney Prize* (No. VII., p. 694).
3. *The Cameron Prize* (No. VIII., p. 694).
4, 5. *The Gunning Victoria Jubilee Prizes in Practice of Physic and Physiology* (No. X., p. 695). Competitive Essays to be lodged with the Dean of the Faculty of Medicine on or before 30th April 1897.
6. *The Wightman Prize in Clinical Medicine* (No. VI., p. 693). Essays to be given in on or before 6th July.
7. *The Pattison Prize in Clinical Surgery* (No. XXIII., p. 696).
8. *The Dobbie-Smith Gold Medal in Botany* (No. IX., p. 695).
9. *The Ellis Prize in Physiology* (No. III., p. 693).
10. *The Lord Rector's Prize* (No. 2., p. 359).
11. *Two Gray Prizes* (Nos. 8 and 9, p. 359).

WILLIAM DICKSON TRAVELLING FUND.

The William Dickson Travelling Fund. See page 356.

"Bursars in the Faculty of Medicine must annually attend at least two of the Classes necessary for the Degrees of M.B. and Ch.B., and must present themselves at the Examinations necessary for these Degrees.

"Each Bursar must present a Certificate, signed by the Dean, attesting his regular attendance on the proper Classes in the Faculty on each occasion on which he applies to the Factor for a payment."

Certificates, in terms of this regulation, will be given to Bursars, by the *Dean of the Faculty of Medicine*, after 13th November; also at the end of the Session. In applying to the Dean for the Certificate in November, Bursars must present their Class Cards for the Session; and at the end of the Session they must present certificates from the Professors that they have attended with regularity and made progress in their studies. Payments are made by the University Factor, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 14th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars, Scholars, and Fellows who desire to resign should at once announce this to the Dean and to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

LECTURESHIP.

The Swiney Lectureship on Geology, value £144 per annum, tenable for five years, is open to Graduates of the University of Edinburgh. It is in the patronage of the Trustees of the British Museum, and for the next appointment application should be made to these Trustees.

THOMAS R. FRASER, M.D., LL.D.,
Dean of the Faculty of Medicine and Professor of Materia Medica.

Faculty of Music.

Dean—Professor NIECKS.

—o—

STUDENTS who do not intend to graduate in Music may, without matriculating or passing any Preliminary Examination, attend any of the Classes on payment of the Five Shillings University Entrance-Fee, besides the Class Fees.

Those desiring to graduate must pass the Preliminary Examination, and must Matriculate before enrolling in any Class.

The Classes, open both to men and women students, will meet as undernoted, except during the Christmas Vacation, *i.e.*, from Friday, 18th December 1896, to Tuesday, 5th January 1897, inclusively.

Programme of Classes.

WINTER SESSION, 1896-97.

PROFESSOR NIECKS.

Lectures, Theoretical and Practical Instruction, and Concerts, in the Winter Session of 1896-97 :—

1. HISTORY OF MUSIC FROM THE BEGINNING OF THE CHRISTIAN ERA TO THE PRESENT DAY, MORE ESPECIALLY OF THE 15TH, 16TH, AND 17TH CENTURIES.

Once a week (Thursdays, 3-4), beginning 22nd October. Twenty Lectures. Fee, One Guinea.

2. MUSICAL ANALYSIS.

The styles of the great pianoforte players and composers from Mozart and Clementi to Liszt and Rubenstein, with an introductory sketch of the harpischord period. Once a week (Mondays, 3-4), beginning 19th October. Twenty Lectures. Fee, One Guinea.

3. HARMONY.

Twice a week (Tuesdays and Fridays, 3-4), beginning 20th October. Fee, Two Guineas.

4. ADVANCED HARMONY.

Twice a week (Tuesdays and Fridays, 4-5), beginning 20th October. Fee, Two Guineas.

5. COUNTERPOINT AND COMPOSITION.

Once a week (Mondays, 4-5), beginning 19th October. Fee, Two Guineas.

6. SERIES OF FIVE HISTORICAL CONCERTS.

Fee for these Concerts, Half-a-Guinea. Those attending any of the Music Classes are admitted free.

FOR MATRICULATION FEES, &c., see page 2

Class Prize Lists.

1895-96.

HARMONY.

HONOURS CERTIFICATE. — 1. Francis M. Crosbie (*Medallist*); 2. Ethel Montgomery; 3. Edith Norrie.

HONOURABLE MENTION CERTIFICATE.—4. Ella S. Donaldson; 5. Marian Agnes Maclean; 6. Joan C. Graham.

ADVANCED HARMONY.

HONOURS CERTIFICATE.—1. Helen Lyon Smith (*Medallist*); 2. Agnes Johnston (*Medallist*); 3. Margaret Fullarton Kennedy; 4. Janet Jeffrey.

COUNTERPOINT AND COMPOSITION.

HONOURS CERTIFICATE. — 1. Helen Lyon Smith; 2. Christina Struthers (*Medallists*); 3. Agnes Johnston; 4. Robert Hutton Malcolm; 5. William Gilchrist Cochrane.

HISTORY OF MUSIC.

HONOURS CERTIFICATE. — 1. Robert Hutton Malcolm (*Medallist*); 2. Elizabeth Irvine; 3. William Gilchrist Cochrane.

HONOURABLE MENTION CERTIFICATE.—4. Mary Edith Rowe; 5. Francis M. Crosbie; 6. Walter Stanley Armitage.

MUSICAL ANALYSIS.

HONOURS CERTIFICATE.—1. Helen Lyon Smith; 2. Robert Hutton Malcolm; (*Medallists*); 3. Margaret Fullarton Kennedy; 4. Janet Jeffrey; 5. Helen Anderson; 6. Mary Edith Rowe; 7. Rachel Neill Fraser; 8. Eveline E. G. Dallas; 9. Elizabeth Irvine; 11. Edith Walton.

FREDERICK NIECKS, *Professor.*

Regulations for Graduation in Music.

I. Two degrees in Music are conferred by this University, viz., Bachelor of Music (Mus. Bac.), and Doctor of Music (Mus. Doc.).

I. Preliminary Examination.

II. 1. Every Candidate for the degree of Mus. Bac. must pass a preliminary examination in :—(1) English, including Geography and British History; (2) Elementary Mathematics or Elementary Physics or Logic; (3) any two of Latin, Greek, French, German, and Italian, but one at least must be a modern language.

2. The extent and standard of the preliminary examination is determined by the Senatus.

3. A degree in Arts not being a degree *honoris causâ tantum*, in any University of the United Kingdom, or in any Colonial or Foreign University, specially recognised for the purpose by the University Court, after consultation with the Senatus, exempts from the preliminary examination; and the Senatus has power to determine what examinations, other than those for the degree mentioned, will be accepted in whole or in part in place of the preliminary examination.

II. Bachelor of Music.

University Attendance.

III. Candidates for the degree of Mus. Bac. must attend, in the University of Edinburgh during a whole Winter Session, a course or courses of instruction extending in all to not less than eighty Lectures, and including a course on the History of Music.

III. First Professional Examination.

IV. There is a First Professional Examination in Music in the following subjects :—

(1) Singing or performing upon some Musical Instrument.
(2) Reading at Sight.
(3) Elements of Music, including Musical Modes, and Scales, Notation, Measure, and *Tempo*.
(4) Harmony in not more than four parts.
(5) Elementary Counterpoint.
(6) Form: Sonata, Rondo, Fugue, and Minor Structures.
(7) Outlines of the History of Music.

The Ear Test will be applied to every Candidate.

IV. Second Professional Examination.

V. There shall be, at least one year after the candidate has passed the First Professional Examination, a second Professional Examination in Music and in Literature in the following subjects :—

(1) One of the following languages not already taken in the preliminary examination—French, German, Italian.

(2) Rhetoric and English Literature (including Prose Composition and a knowledge of Metrical Rules).

(3) Harmony in not more than five parts.

(4) Advanced Counterpoint.

(5) Canon in two parts, and Imitation and Fugue in not more than four parts.

(6) Form (Description of Structure and Character of Musical Forms, and Analysis of Musical Works).

(7) Elements of Instrumentation (Compass of the Orchestral Instruments, and of the Organ and Pianoforte).

(8) Critical Knowledge of certain prescribed Scores.

(9) Playing at Sight from easy Vocal and Instrumental Scores, and from Figured Bass.

(10) The History of Music.

(11) Acoustics in so far as connected with the Theory of Music, and Physiology of the Vocal Organs.

Each Candidate will also be required to submit the following exercises composed by himself :—

(*a*) A Solo Song with Pianoforte Accompaniment.

(*b*) A Four-part Vocal Composition.

(*c*) An Instrumental Composition (other than a Dance) for the Pianoforte or Organ, or for any Stringed or Wind Instrument with Pianoforte or Organ Accompaniment.

The extent and standard of examination is fixed by the Senatus. The examination is partly written and partly oral and practical.

V. Doctor of Music.

V. Bachelors of Music of this University, of not less than three years' standing, and not less than twenty-five years of age, may offer themselves for the degree of Mus. Doc. under the following regulations :—The degree is given in three Departments, those of (1) Composers ; (2) Executants ; (3) Theorists or Historians ; and Candidates may present themselves in one or more Departments.

VI. (1) Candidates for the degree of Mus. Doc. as Composers must submit a prescribed number of Vocal and Instrumental Compositions in the larger forms (such as Oratorio, Opera, Cantata, Symphony, Sonata, Overture). Each work must be the original and unaided composition of the Candidate, and must be accompanied by a declaration to that effect signed by the Candidate.

(2) Candidates will be examined in the following subjects :—

(*a*) The more recondite Contrapuntal Forms—Fugal Writing in more than four parts, &c.

(*b*) Instrumentation, including prescribed books on the subject.

(*c*) The works of the great Composers from Palestrina onwards.

VII. (1) Candidates for the degree of Mus. Doc. as Executants will be required to show their special skill in the execution of Solo and *ensemble* works in different styles. The works will be selected partly by the Candidates and partly by the examiners.

(2) The Candidates will be examined in sight-reading, and must give evidence of their power of playing Orchestral Scores, and will be required to invent Transitions and to modulate from one Key and Piece to another. They will further be required to pass an examination on the History and Literature of their special instrument, and on the method of teaching that instrument.

VIII. (1) Candidates for the degree of Mus. Doc. as Theorists or Historians must present one or more treatises on Theoretical or Historical subjects, which must be the result of research and original thought, not mere abstracts or compilations of existing works. They must be accompanied by a declaration signed by the Candidate that they are his own unaided work.

(2) Candidates will also be required to pass an examination (*a*) in the Theory and (*b*) in the History of Music.

The examination will be on a higher standard in the subject which the Candidate selects as his specialty.

IX. The examiners for the degree of Mus. Doc. are the same as for the degree of Mus. Bac.

It is competent to the University Court of the University of Edinburgh, after consultation with the Senatus, to modify from time to time the provisions as to curriculum hereinbefore contained, in case such modification shall be rendered desirable.

X. (1) The degree of Mus. Doc. may be conferred *honoris causâ tantum.*

(2) The honorary degree of Mus. Doc. will not be conferred by the Senatus on any person unless recommended by the Faculty of Music in a reasoned representation, submitted in writing to the Senatus, and considered and approved by the Senatus at a special meeting at which not less than two-thirds of the members were present.

Preliminary Examination.

The Examination in Italian, English, Latin, Greek, Mathematics, French, and German is the same as the Preliminary Examination in Italian, English, Lower Latin, Lower Greek, Lower Mathematics, French, and German for the Degree in Arts; and the Examination in Logic and Physics is of the same standard as the Preliminary Examination in these subjects for Degrees in Medicine. The subjects are denoted in the

Time-Table of the Preliminary Examinations for the Degree in Arts by the figure 4.

Candidates for Examination must apply at the Matriculation Office, University (Old) Buildings, for schedules, which must be completed and returned along with the fees, not later than 18th September 1896 and 1st March 1897 for the autumn and spring Examinations respectively.[1]

Candidates applying for information regarding the Preliminary Examination will be supplied with copies of the Regulations for the Preliminary Examinations for Degrees in Arts and in Medicine, which give the outlines and dates, &c., for the Preliminary Examination for Degrees in Music.

FEES.[1]

Preliminary Examination for each appearance, 10s. 6d.

Degree of Mus. Bac. is £10, 10s., divided as follows :—

First Professional Examination	£3	3	0
Second Professional Examination—Literary part .	1	1	0
Do. Do. —Musical part .	3	3	0
For the Diploma	3	3	0

Candidates who fail pay a fee of 10s. 6d. for each subject in which they are admitted to re-examination.

Candidates may pay the fees personally, or transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts.

DATES OF DEGREE EXAMINATIONS.

1897.

March 10. Names to be given in, Certificates shown, and fees paid, on or before this date.

„ 25. Singing, Playing, Reading at Sight, and Ear Test, at 10; Harmony, at 2.

„ 26. Counterpoint, at 10; Elements of Music, at 2; Form, at 3.

„ 27. History of Music, at 10.

1 If names are not entered, and fees are not paid, on or before the stated dates, a late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination.

Examination Papers.

FIRST PROFESSIONAL EXAMINATION FOR THE DEGREE OF BACHELOR OF MUSIC.

ELEMENTS OF MUSIC.

TUESDAY, 16*th July* 1895.

Time allowed—Two hours.

1. Define the terms Pitch, Interval, Measure, and Rhythm.

2. What intervals are $b\sharp$—$f\sharp$, $e\flat\flat$—f, $g\sharp$—$f\times$, and c—$b\flat\flat$?

3. Write and name the notes and corresponding rests of the time values now in use.

4. What is a Quintuplet, a Septuplet, and a Nonuplet?

5. How do you divide the different measures?

6. On which part or parts of the bar do the accents fall? Are the several accents of a bar alike in emphasis? If not, how do they differ?

7. Can you give an account of the history of our Chromatic Signs (the Flat, Sharp, Natural, &c.)?

8. What is the effect of the Flat, Sharp, Natural, &c., when they occur in the signature, and what is their effect when they occur in the course of the piece?

9. What is the origin of the Clefs?

10. Name first the Clefs now in general use, and afterwards those that are obsolete.

11. Do you remember a peculiarity in the key-signatures of former times—say, in the time of Bach and Handel?

12. What is the original form of the Minor Scale, and how did the modern form develop from it?

13. Define Key and Tonality.

14. Write in musical notes what is meant by "the twice-accented *f*," "the 4-feet *c*," "the contra *g*," and "the 16-feet *e*."

15. Give a literal translation, and, if necessary, a further explanation, of the following terms:—

Morendo, Lusingando, Tempo doppio, L'istesso tempo, Allargando, Con sordino, Senza sordino, Senza sordini (in pianoforte music), *Ritenuto, Ritenendo,* and *Rallentando.*

16. Group the following terms according to the degree of speed they denote. Begin with the slowest movement, and indicate doubtful cases:—

Andante, Prestissimo, Largo, Andantino, Adagio, Lento, Allegretto, Grave, Vivace, Moderato, Larghetto.

17. (*a*) Describe the *Mordent.*

(*b*) Say what is meant by *Appoggiatura* and *Nachschlag.*

(*c*) Give the old and the modern meaning of *Acciaccatura.*

(*d*) Write in musical notes how you would perform in moderate time:—

a crochet (say, *g*) preceded by a Double Appoggiatura (say, *f*♯—*a*);

a turn on a dotted crotchet (*b*) followed by a quaver (*c*);

a turn on a semibreve (*b*) followed by a dotted minim.

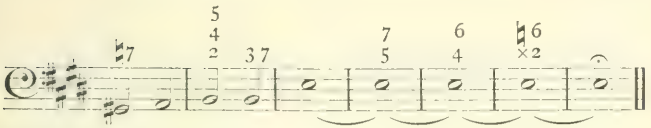
18. What is the meaning, or are the meanings of the term "Cadence"? Is any difference made in the English use of the terms "Cadence" and "Cadenza"?

HARMONY.

TUESDAY, *16th July* 1895.

Time allowed—Three hours.

No. 1.



No. 2.

No. 3.

No. 4.

No. 5.

1. Add three parts to the Figured Bass (No. 1) making the highest part as melodious as possible, and writing two minims (the same chord in different positions) above the semibreves of bars 9-12.

2. Figure the fragment of a harmonisation by J. S. Bach (No. 2); and having done this, point out any Passing Notes, Auxiliary Notes, and Suspensions that may occur in it.

3. Define and give examples of Passing Notes, Auxiliary Notes, and Suspensions (either quotations or of your own invention).

4. Which are the two tendencies that primarily determine the progression of chords and their constituents?

5. State the rules relating to Open and Hidden Consecutives (Perfect Octaves, Unisons, and Fifths). Describe fully the conditions on which depend the admissibility and the more or less inoffensive nature of Hidden Consecutives.

6. Is the application of the rules relating to Open and and Hidden Consecutives as strict in instrumental as in vocal music? If not, why not? In this connection state also the rule relating to the melodic use of Diminished and Augmented Intervals, and the extent of its application in vocal and instrumental music respectively.

7. How do you explain the presence of the Consecutive Fifths in the examples by Bach, Spohr, and Mozart, (No. 3)—which are the mitigating circumstances that prevented them from being repugnant to the composers?

8. Harmonise the German Chorale (No. 4).

9. Harmonise the melody (No. 5) simply, as a folk-song ought to be harmonised.

10. Contrive the following modulations:—

(*a*) From G major to F♯ major, and from A major to E♭ minor, abruptly, but smoothly, by the Chord of the Dominant Seventh of the new key.

(*b*) From D major to F minor by the Chord of the Dominant Seventh of the new key preceded by a chord common to both keys.

(*c*) Vary the following chords enharmonically, and resolve them—

(Four-part harmony.)

(*d*) In any way and by any number of chords: from D major to C major, and back to D major; and from G minor to B♭ major, C minor, and back to G minor.

ELEMENTARY COUNTERPOINT.

WEDNESDAY, 17*th July* 1895.

1. What are the principal characteristics that distinguish Strict from Free Counterpoint?

2. Are the rules of Strict Counterpoint purely capricious, or have they a reasonable object in view? If there is such an object, mention it.

3. Is the style of Strict Counterpoint the invention of pedagogues and merely an educational instrument, or has it at any time been a living style, a style evolved and employed by creative artists?

4. What melodic intervals may be used in Strict Counterpoint? And why only these and not others?

5. Write a melody, consisting of notes of equal length, in the strict style.

6. Add to the following *Cantus firmus* an alto part in the second species. Write this and the following exercises in open score, and use the proper clefs.

7. Put the above C. f. in the bass, and add to it a tenor part in the fourth species (suspensions).

8. Add two parts to the following C. f., one below in the first species, and one above in the fifth (florid).

9. Give the above C. f. to the highest part, and add to it a middle part in the first species and a bass part in the third species (four against one).

10. Put the above C. f. in the tenor, and add three parts, all in the first species.

HISTORY OF MUSIC.

WEDNESDAY, 17*th July* 1895.

Time allowed—Two hours.

1. What is the main and natural divison of the history of music since the beginning of the Christian era?

2. Name, date, and characterise the principal schools of composition of the 15th and 16th centuries.

3. When did the Neapolitan school become prominent? What characteristics more especially distinguished it? Who were the most famous masters of that school, and at what time did they flourish?

4. Describe the state of music and the changes that took place in the latter part of the 16th and the early part of the 17th century.

5. When did Handel live, and who were his most notable musical contemporaries in Germany, Italy, and France?

6. State the nationality, time and sphere of action, and principal achievements of Lully.

7. Who is the first great English composer mentioned in history, and of what time was he?

8. What account can you give of Henry Purcell and his works?

9. What kinds of composition were cultivated in the 16th century, and what kinds in the 17th?

10. Who is the master whom we call the father of the String Quartet and the Symphony? Is he called the father because he was the first who wrote String Quartets and Symphonies, or why? In which years did he begin to cultivate these branches of the art (if you do not remember the exact time, state the approximate time)?

11. Describe the nature of Plain Chant, and add also a few historical notes.

12. State the principal points in which the art of Palestrina differs from that of more modern times.

13. What was the aim of Gluck's reform? And when did he attempt the reform?

14. In what respects do the later operas of Wagner differ from those of his predecessors?

15. Name the foremost English composers of the Elizabethan age; and the most famous Glee composers of 18th and 19th centuries.

16. Enumerate the principal works of Handel and J. S. Bach, and differentiate their styles.

17. Describe the form of the Chamber Cantata.

18. State briefly the time, nationality, and claims to fame of the following musicians: Alessandro Scarlatti, Kalkbrenner, Claudio Monteverde, Campra, Löwe, François Couperin, Glinka, and Pistocchi.

FORM.

WEDNESDAY, 17*th July* 1895.

(*Time allowed — Two hours.*)

1. Define the term "Form," and say what other terms may be substituted for it.

2. What is your definition of a Period?

3. How may a Period be divided?

4. Do all Periods admit of the same divisions?

5. Do Periods and the Divisions of Periods differ in length, or are they always of the same length? And are Periods and Parts of Periods invariably symmetrical? If these questions have to be answered in the negative, describe some of the possible arrangements.

6. What is the nature of the material contents of a period?

7. What is meant by Binary and Ternary Form?

8. One may say that there are three factors in form—three things from which arises what we call form. Can you name these three factors?

9. Describe the Sonata—the number of its movements, the possible forms of these movements, the keys in which they appear, and more especially the First-movement Sonata Form.

10. Describe the structure of the Fugue.

11. Analyse Nos. 2 and 3 of Schumann's *Album for the Young*, Op. 68.

12. Analyse of Beethoven's Sonata, Op. 10, No. 3, in D major, the first movement (*Presto*), the second movement (*Largo e mesto*), and the last movement (*Rondo*).

13. In connection with J. S. Bach's Fugue in F major ($\frac{3}{8}$ time), No. 11 of the *Wohltemperirte Klavier*, answer the following questions.

(*a*) Give the extent of the subject. (*b*) Where does the second Exposition begin? (*c*) Whence is the material of the second Episode (where does it begin?) derived? (*d*) Point out the Stretti.

BUCHER SCHOLARSHIP.

By the will of Signor Theophile Bucher, his trustees were enjoined to pay over the residue of his estate, amounting to about £4000, to the University, for the purpose of founding one or more Scholarships in Music to be held by any young men born in Scotland, who may shew a natural talent for music and wish to make it their profession, for the purpose of improving their education, and enabling them to prosecute the study of the science and art of Music in Italy, Germany, and France.

The Subjects of Examination for the Scholarship include Harmony, Rhythm, and Counterpoint, and the competition is open to young men between the ages of sixteen and twenty-five inclusively. The value shall not, after deducting the expenses of management and of examination, exceed £120 in any one year, the interest in excess of that sum to be added to the capital to form a second Scholarship. It is tenable for three years, and may be extended to a period not exceeding two years, during which time the scholars must prosecute the study of the science and art of Music in Italy, Germany, and France, as the Senatus, on the recommendation of the Faculty of Music, may determine. The Scholarship may be open in 1899. See Scheme of Administration, page 709 of CALENDAR for 1894-95.

1896. *Robert Hutton Malcolm.*

FREDERICK NIECKS,
Dean of the Faculty of Music.

New Foundations, &c.

REGULATIONS FOR GEORGE HERIOT'S FELLOWSHIPS.

(1) The Fellowships shall be open to any Bachelor of Science or of Medicine of the University of Edinburgh of not more than five years' standing from his Bachelor's Degree, or to any Master of Arts with Honours, of the University of Edinburgh, of not more than five years' standing from his Master's Degree, provided always that the Candidate shall have attended during his curriculum for not less than two years at the University of Edinburgh.

(2) Applications for these Fellowships must be lodged with the Secretary of Senatus not later than 1st June each year. The Application must be accompanied by a Thesis in terms of Rule 3 hereafter, and by a statement of the manner in which the Applicant proposes to fulfil the conditions of tenure laid down in Rule 4 hereafter. At the same date, applications shall be lodged by such of the Fellows of the preceding year as may desire a continuation of their Fellowship, and can show good reason why such continuation should be granted.

(3) One Fellowship shall be offered each year, in each of the following three Groups of Study :—

(1) Mathematical, Physical, Experimental, and Natural Science, embracing the following subjects :—Mathematics, Natural Philosophy, Astronomy, Botany, Geology, Chemistry, Zoology, Physiology, Human Anatomy, Anthropology.

(2) Language and Literature, embracing — Latin, Greek, Modern Greek, English, French, German, Italian, Sanskrit, Hebrew, Arabic, Syriac, Celtic.

(3) Philosophy and History, embracing — Logic and Metaphysics, Moral Philosophy, Political Economy, Education (Theory, History, and Art of), Philosophy of Law, History, Archæology and Art (History of), Constitutional Law and History, Roman Law, Public Law.

The award shall be made by Competitive Examination among the Candidates in each Group. This Competitive Examination shall be conducted by means of Theses composed by the competing Candidates on subjects, chosen by themselves, connected with their special study

or branch of research, as announced by them in terms of Rules 2 and 4 hereof.

The examination of the Theses shall be entrusted to Examiners appointed by the University Court after consultation with the Senatus.

The said Examiners shall make a joint report to the Senatus on the Theses, and the Senatus shall, after consideration of said report, recommend the Heriot Governors to award the Fellowships, provided the Senatus are satisfied that the Candidates chosen by the Examiners are sufficiently well qualified.

In the event of equality between Candidates in two different subjects within the same group, preference shall be given to the subjects in the order of their occurrence in the above list; provided always, that after each occasion on which an award has been made in any particular subject, the name of that subject shall be removed to the bottom of the list in the respective Group.

In the case of no award being made in any Group, the Fellowship thus set free may be awarded to one of the Fellows of the preceding year in any of the three groups (in accordance with Rule 6), or may be offered to the most deserving of the unsuccessful Candidates in one of the other groups, as the Senatus, on the report of the Examiners, may recommend.

(4) During his year of tenure the Fellow shall prosecute Research in some department of Language and Literature, Philosophy and History, or Science, to be specified by him in his application. The Applicant for a Fellowship must give evidence that his time will be sufficiently at his disposal, during the year of his tenure, to allow him to carry on the research specified. And he must give evidence, especially in his Thesis, of capacity for conducting such research, either by describing work which he has already done or by detailing plans for future work.

(5) Payment of the Stipend of the Fellowship shall be made half-yearly in advance. Before receiving any payment after the first the Fellow shall submit to the Dean of the Faculty in which he is a Graduate a written report on the progress of the work in which he is engaged, with a programme of his future work. If this report and programme appear to the Dean, or, if he is in doubt, to the Senatus, to be sufficient, he shall countersign the same and forward them to the Treasurer of the Heriot Trust as warrant for the payment of the Fellow's stipend.

(6) It shall be in the power of the Heriot Governors, if they see fit, in special cases, on receipt of a report from the Senatus recommending such action, to continue the tenure of a Heriot Fellow for such period as they may determine.

(7) It shall be in the power of the Heriot Governors at any time to make such inquiries through the Senatus into the conduct and work of a Heriot Fellow as they may desire, and to suspend or discontinue his Fellowship should they see fit, and also to take like action on any report originating with the Senatus itself.

Benefactors of the University.

THE Revenues of the University were formerly scanty and very inadequate for the encouragement of the higher education and learning in the Scottish metropolis. Scholarships and Fellowships were unknown prior to those recently instituted, and the emoluments of several of the Chairs are still greatly inferior to those in many other Universities.

During the early period of its history, the University received a considerable number of small donations and bequests, chiefly for Bursaries. Notices of these will be found in the preceding pages, in the Histories of the University by Bower, Dalzel, and Grant, and in the Report of the Universities' Commissioners in 1830. A list of early Benefactors to the Library is given at p. 41.

By Act 1 & 2 Vict., cap. 55, the various sums of money mortified in the hands of the Town Council for the support of the University, amounting to £13,119, were discharged, and an annual payment of £2500 (since reduced to £2170), secured in terms of "The Edinburgh Corporation Stock Act, 1894," over the Common Good of the City, &c.

Within this century, but especially since 1860, many donations and bequests have been made by Benefactors of the University for the foundation of Fellowships, Scholarships, and Bursaries, for the endowment of Chairs, and for the erection of the New Buildings, including the great "M'Ewan Hall." As the University, however, is still very inadequately endowed, much requires to be done that it may not fall behind the requirements of the age. Intending Benefactors are respectfully reminded that additional CHAIRS, LECTURESHIPS, LABORATORY EQUIPMENTS, LIBRARY ENDOWMENTS, SCHOLARSHIPS, BURSARIES, and FUNDS for RESEARCH, for GENERAL MAINTENANCE, and for BUILDING, are urgently required. The

names of Benefactors, if so desired, may be connected with the Benefactions they bestow. Such Benefactions may simply be conveyed to the "University of Edinburgh." All necessary information will be gladly afforded by the Secretary of the University Court, the Secretary of Senatus, the Registrar, the Deans of the Faculties, or the University Librarian.

The following list includes the chief Benefactors of the present century, together with the purposes of their benefactions[1] :—

(A.)—*Founders of Bursaries in the present Century.*

Rev. J. STUART, South Carolina—Founder of the Stuart Bursaries.

Sir JOHN M'PHERSON, late Governor-General of India—Founder of the M'Pherson Bursary (now the Macpherson Scholarship).

Rev. R. BLAIR, D.D.—Founder of the Blair Bursaries in Arts and Theology.

J. STEWART HEPBURN, Esq. of Colquhalzie—Founder of three Theological Bursaries.

JOHN JAMIESON, Esq., Edinburgh—Founder of the Jamieson Bursary.

GEORGE PARKER BIDDER, Esq.—Founder of the Jardine Bursary.

WILLIAM LENNIE, Esq., Teacher, Edinburgh—Founder of the Lennie Bursaries.

JOHN BRUCE, Esq., Trinity Crescent, Edinburgh—Founder of the Bruce Bursaries.

M'DIARMID TESTIMONIAL TRUSTEES—Founders of the M'Diarmid Bursary.

W. PATRICK, Esq. of Roughwood—Founder of the Patrick Bursaries.

JAMES GRAY, Esq. of Baadpark—Founder of the Gray Bursaries.

EDINBURGH CAITHNESS ASSOCIATION—Founders of a Bursary.

EDINBURGH GALLOWAY ASSOCIATION—Founders of a Bursary.

AYRSHIRE CLUB—Founders of two Bursaries.

PEEBLESSHIRE SOCIETY—Founders of a Bursary.

Dr ABERCROMBIE, Cape Town—Founder of a Bursary.

Mrs MARGT. TYNDALL BRUCE of Falkland—Founder of Bursaries.

TRUSTEES of FRANCIS J. SCOTT, Esq. of Mount Lodge, Portobello—Founders of two Bursaries.

[1] An Association exists for the purpose of promoting—1st, The Foundation of Bursaries and of Scholarships and Fellowships for the encouragement of the higher learning among the more advanced Students; 2d, The better Endowment of existing Chairs where necessary; 3d, The Foundation of new Professorships and Lectureships; 4th, The aid of the General University Fund; and 5th, Other University objects.

The Chancellor of the University is President of this Association; the Hon. Secretary is Sir Alexander Christison, Bart.; and the Acting Secretary is Robert G. Scott, Esq., W.S., 19 Castle Street, Edinburgh.

Miss Hannah Harrison of Lasswade—Founder of a Bursary.

Miss Mary Ettles of Inverness—Founder of three Bursaries, and the "Ettles Medical Scholarship."

Trustees of the Rev. John Spence, Minister of Kinnaird—Founders of two Bursaries.

John Robertson Sibbald, M.D.—Founder of Five Bursaries.

Argyllshire, Bute, and Western Isles Associations—Founders of a Bursary.

Subscribers to Memorial to Robert Stewart, Esq. of Ardvorlich—Founders of a Bursary.

The Edinburgh Border Counties Association—Founders of two Bursaries.

The Right Hon. Thomas, Earl of Zetland—Founder of the Orkney and Zetland Bursary.

Trustees of James Grierson, of Ogscastle—Founders of the Grierson Bursaries.

Trustees of Dr Mackie, Leith—Founders of Mackie Bursaries.

Trustees of J. Cairns, Esq., W.S.—Founders of the Cairns Bursary.

Trustees of Mrs Johnstone of Harthope, Moffat—Founders of the Johnstone of Harthope Bursary,

Trustees of James Lambert, Esq., Alloa—Founders of the Lambert Bursary.

Robert Marshall, Esq., Merchant, Edinburgh—Founder of the Marshall Bursary.

John Fothringham, Esq. of Heathpool—Founder of the Fothringham and Forrest Bursaries.

Right Hon. Lawrence, Earl of Zetland—Founder of the Zetland Bursaries.

Andrew Thomson, M.D.—Founder of Eight Bursaries in Arts, Divinity, Law, and Medicine.

Edinburgh East Lothian Association—Founders of a Bursary in Arts.

Edinburgh University Endowment Association—Founders of Six Bursaries in Arts.

Mrs Isabella Webster—Founder of the Webster Bursaries in Divinity.

Dr John Aitken Carlyle—Founder of two Bursaries in the Faculty of Medicine.

Mrs Elizabeth Mackenzie—Founder of the Mackenzie Bursaries.

Dr John Muir—Founder of a Classical Bursary.

Trustees of Mrs Barbara Macaulay or Mylne—Founders of a Bursary in Divinity.

TRUSTEES OF Rev. JOHN PATTERSON—Founders of a Bursary in Anglo-Saxon Grammar and Literature.

THOMAS CARLYLE—Founder of the John Welsh Bursaries in Mathematics and Classics.

Mrs HELEN ANDERSON or RONALD, Liverpool—Founder of the Anderson Bursaries.

SUBSCRIBERS to Testimonial to W. MACKINNON, Esq. of Balinakill —Founders of the Mackinnon Bursaries.

TRUSTEES of JAMES WHITELAW—Founders of Whitelaw Bursaries.

TRUSTEES of WILLIAM RENTON, Esq.—Founders of a Bursary in Divinity, and one in Arts.

Miss ISABELLA MACDOUGALL, Perth—Founder of the John and Isabella Macdougall Bursaries.

ROBERT HUNTER, Esq., Dalhousie Chesters—Founder of two Bursaries in Divinity.

ROBERT PILLANS NEWTON of Castlandhill and Drumcross—Founder of the Newton Bursaries.

PETER CAMPBELL MANN of Seaham Harbour, Durham—Founder of a Bursary.

CHARLES JARDINE of Thorlieshope—Founder of Bursaries in Arts.

ISAAC ANDERSON HENRY—Founder of the Anderson Henry Prize.

Mrs H. E. MORISON—Founder of the Mackenzie (Stornoway) Bursary.

DANIEL MACLAURIN, Esq.—Founder of the Maclaurin Bursary.

THOMAS LOCKERBY, Esq.—Founder of the Lockerby Bursary.

GEORGE COUSIN, Esq.—Founder of the "Bailie Cousin Bursary."

THOMAS HILL PATTISON, M.D.—Founder of the Pattison Prize in Clinical Surgery.

Major ROBERT ORR CRICHTON of Lynn—Founder of the Crichton Bursaries in the Faculty of Medicine.

Rev. THOMAS MAULE—Founder of Maule's Bursaries.

Mrs A. B. R. MILNER FOTHERGILL of Hayton Quarry—Founder of the Milner Fothergill Gold Medal in Therapeutics.

DONALD FRASER, M.D., London, and ASSOCIATION for the BETTER ENDOWMENT of the UNIVERSITY—Founders of the Donald Fraser Bursary in Experimental Physics.

SUBSCRIBERS TO MEMORIAL TO PROFESSOR KELLAND—Founders of Kelland Memorial Prize.

GOVERNORS OF GEORGE HERIOTS' TRUST—Founders of Bursaries in Arts, Science, and Medicine.

Dr THOMAS CHARLES HOPE, late Professor of Chemistry—Founder of the Hope Prize (now two Hope Scholarships).

Mrs Margaret Tyndall Bruce—Founder of Prize in Logic Class.

Daniel Ellis, Esq.—Founder of "The Ellis Prize" in the Faculty of Medicine.

John Edward Baxter, Esq., of Craigtay, bequeathed the reversion of his Estate for the purpose of founding Scholarships, etc.

Dr Neil Arnott gave £1000 for Promoting the Study of Experimental Physics among the Medical Students of the University.

Rev. Hew Scott of Wester Anstruther—Founder of the Scott and Dunbar Prize in Greek.

John Wilson, Esq. of South Bantaskine—Founder of the Robert Wilson Prize in Chemistry.

Mrs E. Wightman—Founder of the Wightman Prize in Clinical Medicine.

James George Beaney, Esq.—Founder of the Beaney Prize.

Andrew Robertson Cameron, M.D., of Richmond, New South Wales—Founder of the Cameron Prize.

(B.)—*Founders of Scholarships or Fellowships in the present Century.*

The Pitt Club—Founders of two Scholarships, one in Arts and one in Divinity.

James Mackenzie, Esq., W.S.—Founder of Mackenzie Scholarship.

Alex. Henry Rhind, Esq. of Sibster—Founder of the Rhind Scholarships and Bursaries.

Sir David Baxter, Bart., of Kilmaron—Founder of the Baxter Scholarships in Arts and Science.

Sir William Fettes, Bart.—Founder of the Fettes Exhibitions.

John Maxton, Esq.—Founder of a Divinity Scholarship.

Miss Elizabeth Drummond—Founder of the Drummond Scholarship.

Mrs Margaret Tyndall Bruce—Founder of three Scholarships.

James Guthrie, Esq., of London—Founder of the Guthrie Fellowship.

Subscribers to Hamilton Memorial Fund, and Association for the Better Endowment of the University—Founders of a Philosophical Fellowship.

Association for the Better Endowment of the University—Founders of a Classical Fellowship.

Trustees of Dr J. H. Gilchrist—Founders of three Scholarships for Natives of India.

John Robertson Sibbald, M.D.—Founder of a Medical Scholarship.

Miss Mary Baxter, of Balgavies—Founder of Scholarships.

Subscribers to Falconer Memorial Fund—Founders of a Fellowship.

SUBSCRIBERS to SYME FELLOWSHIP—Founders of a Fellowship in the Medical Faculty.

SUBSCRIBERS to GOODSIR MEMORIAL FUND—Founders of a Fellowship in the Medical Faculty.

Rev. JOSEPH TAYLOR GOODSIR bequeathed £900 to Supplement the Goodsir Memorial Fund.

ROBERT A. GOODSIR, M.D., Edinburgh, bequeathed residue of his Estate, amounting to about £2000, to supplement the Goodsir Memorial Fund.

TRUSTEES OF Mrs CHARLES MACLAREN—Founders of the Charles Maclaren Scholarship.

SUBSCRIBERS to GLOVER MEMORIAL FUND, and ASSOCIATION for the BETTER ENDOWMENT of the UNIVERSITY—Founders of the "Glover Divinity Scholarship."

Mrs M. ARNOTT, Widow of NEIL ARNOTT, M.D.—Founder of the "Neil Arnott Scholarship for Experimental Physics."

JOHN EDWARD BAXTER, Esq. of Craigtay, bequeathed the residue of his estate, out of which three Scholarships named after him have been founded by the University Endowment Association.

The Rev. DAVID AITKEN, D.D., formerly Minister of Minto—Founder of the Aitken Scholarship.

DAVID SKIRVING, Esq., of 13 Westbourne Park, London—Founder of the Skirving Scholarship for Moral Philosophy.

ANDREW THOMSON, M.D.—Founder of a Scholarship.

Misses KIDD of Woodhouse—Founders of the David Kidd Divinity Scholarship.

Dr R. H. GUNNING of Rio Janeiro—Founder of ten Prizes in the Faculty of Divinity, and of eleven Prizes in the Faculty of Medicine.

Dr T. LECKIE—Founder of the Leckie-Mactier Scholarship.

SUBSCRIBERS TO MEMORIAL OF Dr COLDSTREAM—Founders of the Coldstream Memorial Medical Missionary Scholarship.

Mrs JAMES BUCHANAN—Founder of a Scholarship in Midwifery and Gynecology.

Dr ANDREW VANS DUNLOP, H.E.I.C.—Founder of the Vans Dunlop Scholarships in Arts, Law, and Medicine.

Misses STEVEN of Bellahouston—Founders of a Scholarship in Agriculture.

SUBSCRIBERS TO MEMORIAL OF Dr CHARLES MURCHISON—Founders of the "Charles Murchison Scholarship."

Mrs MARY ANN SCOTT or THOMSON of Hawick—Founder of the James Scott Scholarship in Midwifery.

Robert Mackay-Smith, Esq., Edinburgh—Founder of the Mackay-Smith Scholarships in Natural Philosophy and Chemistry.

Dr Frederick John Mouat—Founder of the Mouat Scholarship in Practice of Physic.

Dr John Stark, Auchtermuchty—Founder of the Stark Scholarship in Clinical Medicine.

Mrs Kidd—Founder of "James Fairbairn's Scholarship."

Miss Jane Jeffrey—Founder of the Jeffrey Scholarships.

Dr A. H. Freeland Barbour—Founder of the Freeland Barbour Fellowship.

Miss Matilda Johnston Cobb—Founder of the Cobb Divinity Scholarship.

Mrs Elizabeth Mackie or Trevelyan—Founder of Scholarships in Engineering and Mechanical and Useful Arts.

Mrs Muirhead—Founder of Prize in Civil Law Class.

Subscribers to Lorimer Memorial Fund and Association for the better Endowment of the University—Founders of the Lorimer Travelling Scholarship.

George Scott, Esq., Peckham, London—Founder of the Scott Travelling Scholarship, for purposes of Study or Research.

Governors of George Heriot's Trust—Founders of Fellowships in Arts and Pure Science.

Mrs E. Crozier or Nichol, Edinburgh—Founder of Scholarship in Natural Philosophy.

Trustees of late Earl of Murray—Founders of "The Earl of Moray's Endowment of £20,000" for Original Research.

(C.)—*Founders of New Chairs, Contributors of Endowments to existing Chairs, or of Money, &c., to the University Funds, Library, &c., within the present Century.*

General John Reid—Founder of the Theory of Music Chair, who also bequeathed money to the Funds of the University.

General Sir Joseph Straton—Bequest to the University Funds.

Sir James Erskine, of Torry, bequeathed Pictures, Bronzes, and Marbles to the University. [Lent to the National Gallery.]

Sir William Pulteney—Founder of the Chair of Agriculture.

Dr William Thomson—Founder of the Thomsonian Lectureship in Mineralogy.

Sir George Ballingall, late Professor of Military Surgery—Presented his Library to the University.

Dr W. P. Alison, late Professor of the Theory of Medicine—Presented his Medical Books to the University.

JOHN MUIR, D.C.L., LL.D., Edinburgh—Founder of Sanskrit Chair.

Sir DAVID BAXTER, Bart., of Kilmaron—Founder of the Chair of Engineering.

DAVID COWAN, Esq., of Auchendrane, bequeathed £1000 to the Association for Promoting the Endowment of the University.

Sir RODERICK IMPEY MURCHISON gave £6000 for the Endowment of the Chair of Geology.

J. O. HALLIWELL PHILLIPPS, Esq., presented his valuable Shakespearean Collection to the University.

ROBERT COX, Esq., W.S., bequeathed £5000 for general purposes and for completing the Dome of the University buildings.

Signor THEOPHILE BUCHER bequeathed his Music Library to the Chair of Music, and reversion of estate to found Scholarships in Music.

THE MERCHANT COMPANY OF EDINBURGH, and other Governors of George Watson's and Daniel Stewart's Hospitals—Founders of the Chair of Political Economy and Commercial Law.

Mr HENRY G. and Miss FRANCES WATSON—Donors of Fund for the "Watson-Gordon Professorship of Fine Art." The Deed of Foundation will be found in CALENDAR for 1873-74, p. 320.

Sir D. BAXTER, of Kilmaron, bequeathed £20,000 for the Extension of the University buildings, and £20,000 for the Further Endowment of the Chairs in the Faculty of Arts.

Miss BROWN, of Lanfine, presented a portion of the Minerals and Fossils which belonged to her father—to be called "The Waterhaugh Collection."

THE BELL TRUSTEES, who gave £6000 for the Endowment of the Bell Chair of the Theory, History, and Practice of Education. (Endowment increased in 1886 by £4500, added by Educational Endowments Commission.)

JOHN B. BAILLIE, who transferred the collection of Arabic MSS., formed by Lieut.-Col. Baillie of Leys, to the University Library.

Dr DAVID LAING, bequeathed his MSS. to the University Library.

Mrs HODGSON, presented Works on Political Economy, collected by her late husband, Prof. Hodgson, to the University Library.

Dr VANS DUNLOP bequeathed £3000 to the General Fund of the University.

SUBSCRIBERS to the CELTIC CHAIR, by whom a fund of £14,000 was raised for the endowment of this Chair by the exertions of Professor Blackie.

Miss MARY DICK bequeathed a moiety of the residue of her estate to accumulate for twenty-one years from 1883, or till it shall amount to £10,000, for the Foundation of a Chair of Comparative or Surgical Anatomy, as considered most to be required.

SUBSCRIBERS of £500 and upwards to the "UNIVERSITY OF EDINBURGH BUILDINGS EXTENSION SCHEME":—[1]

The late Sir David Baxter of Kilmaron, Bart., by bequest, less Legacy Duty,	£18,000	0	0
William M'Ewan, Esq., M.P.,	6,500	0	0
The late Duke of Buccleuch and Queensberry, K.G., D.C.L., LL.D.,	4,000	0	0
The Magistrates and Council of the City of Edinburgh,	3,100	0	0
The Right Hon. the Earl of Moray,	2,525	0	0
The Right Hon. The Earl of Rosebery, LL.D.,	2,400	0	0
The Royal College of Physicians of Edinburgh,	1,575	0	0
The Right Hon. the Earl of Stair, K.T.,	1,500	0	0
Messrs John Jeffrey & Co.,	1,500	0	0
The late J. Fulton, Esq., Clinton Road,	1,150	0	0
Charles Andrew Aitchison, Esq., Queen Street,	1,050	0	0
The Most Hon. the Marquis of Bute,	1,000	0	0
Andrew Carnegie, Esq., New York and Pittsburg,	1,000	0	0
The Right Hon. the Earl of Derby,	1,000	0	0
J. R. Findlay, Esq., Rothesay Terrace,	1,000	0	0
The Right Hon. The Earl of Home,	1,000	0	0
The Right Hon. The Earl of Hopetoun,	1,000	0	0
The late Sir William Stirling Maxwell of Pollok and Keir, Bart., LL.D., M.P.,	1,000	0	0
The Rt. Hon. The Earl of Wemyss and March, LL.D.,	1,000	0	0
The Right Hon. the Lord Justice-General, D.C.L., LL.D., Chancellor of the University,	800	0	0
Messrs Thomas Nelson & Sons,	800	0	0
The late Henry George Watson, Esq., C.A.,	800	0	0
The Most Hon. the Marquis of Lothian,	750	0	0
The Society of Writers to the Signet,	750	0	0
J. Lindsay Bennet, Esq., Taviton Street, London,	710	0	0
James Cowan, Esq., Royal Terrace,	700	0	0
Robert Richardson, Esq., Bruntsfield Place,	700	0	0
C. Morrison, Esq. of Islay,	700	0	0
C. Jenner, Esq.,	650	0	0
The late David Anderson, Esq., of Moredun,	600	0	0
James H. Renton, Esq., Park Lane, London,	600	0	0
Professor Sir W. Turner, LL.D.,	600	0	0

[1] See Statement of Funds in Calendar, 1889-90, Appendix, p. 22.

The Most Hon. The Marquis of Hartington, - -	£500	0	0
Charles Cowan, Esq., of Logan House, - -	500	0	0
T. R. Buchanan, Esq., M.P., - - -	500	0	0
P. D. Swan, Esq., Provost of Kirkcaldy, - -	500	0	0
Lady Campbell of Garscube, - - - -	500	0	0
The late William Cumming, Esq., M.D., Ainslie Place,	500	0	0
The late James T. Gibson-Craig, Esq., York Place, -	500	0	0
Professor Crum Brown, - - - -	500	0	0
The Goldsmiths' Company of London, - -	500	0	0
W. Mackinnon, Esq., of Balinakill and Loup, -	500	0	0
The late Graham Menzies, Esq. of Hallyburton, -	500	0	0
John Graham Menzies, Esq., Grosvenor Crescent, -	500	0	0
W. D. Menzies, Esq., Grosvenor Crescent, - -	500	0	0
The late Miss Trail, Aberlady, by bequest, - -	500	0	0
Messrs William Younger & Co., Abbey Brewery, -	500	0	0
The Right Hon. The Earl of Zetland, - - -	500	0	0
Anonymous, - - - - - -	500	0	0

The total amount of subscriptions received was £149,048, 2s. 5d.

EARL OF ROSEBERY provided £50 a year for Lectureship on Philosophy of Natural History for five years.

WILLIAM F. CUMMING, M.D., presented a Drinking Fountain, erected in the Quadrangle of the Old Buildings, in 1886.

JOHN HOPE, W.S., presented a Drinking Fountain to the University New Buildings, 1886.

ALEX. GIBSON, Esq., Advocate, bequeathed £2000, free of legacy-duty, to the General Fund of the University.

WILLIAM M'EWAN, Esq., M.P., founder of the M'Ewan University Hall.

ADAM GIFFORD, Senator of the College of Justice, bequeathed £25,000 for the foundation of a Lectureship for promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term.

JOHN FULTON, Esq., bequeathed £3000 to General University Fund, the greater part of which has been devoted to the equipment of the new Engineering Laboratory, called the "Fulton Laboratory."

Miss ELIZABETH STEVEN, of Bellahouston—Founder of the Steven Lectureship in connection with the Chair of Agriculture.

ALEXANDER LOW BRUCE, Esq., Edinburgh, bequeathed £5000 to assist in founding a Chair of Public Health.

JAMES RITCHIE, Esq., bequeathed £3000 for University purposes.

Highland and Agricultural Society, £631, and Scottish Arboricultural Society, £433 - for further Endowment of Lectureship in Forestry.

Dr Philip Nelson, Annan, bequeathed £50 to University Building Fund.

Misses Margaret Keith Aytoun and Isabella Aytoun—Founders of the Edmondstone Aytoun Fellowship.

Bequests and Donations during 1895-96.

I. *Bequests.*

Bust of the late Professor John Goodsir, bequeathed by his brother, the late Dr Robert Goodsir.

Bequest by the late Mrs E. Crozier or Nichol, of 12 Findhorn Place, Edinburgh, of £2000 for the foundation and Endowment of an Assistantship in connection with the Chair of Natural Philosophy.

Bequest by the late Mrs Jane Allan, 5 Magdala Crescent, Edinburgh, widow of the late John Allan, M.D., H.E.I.C.S., of £1500 for the foundation of a Fellowship in the Faculty of Medicine.

Legacy by Misses Margaret Keith Aytoun and Isabella Aytoun of £2500, free of legacy duty, for the Foundation and Endowment of a Fellowship to bear the name of "The Edmondstone Aytoun Fellowship."

II. *Donations.*

Volume of "Stray Papers on Legal Subjects," presented by Thomas Barclay, Esq., LL.B., Member of the Institute of International Law, Paris.

Copy of the Phra Tripitaka, consisting of 19 volumes, printed in the Pali language but in Siamese characters, presented by His Majesty the King of Siam.

Copies of the French Government's publications of their "Mission Archéologique Française du Caire," presented by Sir Colin Scott Moncrieff, Under Secretary for Scotland.

Bust of Edward Forbes, Professor of Natural History in the University (1854-55), presented by Robert Cox, Esq., of Gorgie, M.P.

Donation by the Trustees of the late Earl of Moray of £20,000, out of the Bequest left by him for the benefit of certain Institutions, as a Fund for the promotion of Original Research in the University of Edinburgh, to be called "The Earl of Moray's Endowment."

Gift by Miss E. A. Ormerod, F.E.S., St Albans, of a collection of Economic Entomology, prepared by herself and her sister.

The Highland and Agricultural Society—£50 towards expense of instruction in Forestry for the current year.

A valuable collection of specimens in illustration of Diseases of the Eye, presented by Douglas Argyll Robertson, LL.D.

Bones of the Lower Limb of the "Black Dwarf," presented by John Brown, Esq.

Two additional Fellowships in Arts or Pure Science, each of £100 a

year, instituted by the Governors of George Heriot's Trust, and styled the "George Heriot Fellowships."

Donation by Hugh Cleghorn, M.D., F.R.S.E., F.L.S., &c., of Stravithie, of £1000 towards Endowment of Lectureships in Forestry.

Bust of Thomas Carlyle, by Woolner, presented by Thomas M'Kie, Esq., Advocate.

Donations to Library.

Besides various valuable contributions from the Governments of Great Britain, Canada, France, India, Italy, New South Wales, Norway and Sweden, Russia, Victoria, &c., the University has, in the course of the year 1895-96, received Donations from the following Universities :—Aberdeen, Basle, Birmingham, Bombay, Buenos Ayres, Calcutta, California, Christiania, Cornell Columbia College, New York, Harvard, Johns Hopkins, Imperial University of Japan, Königsberg, London University, Leyden, Madras, Madrid, Rostock, Toronto, Utrecht, Warsaw, Yale. Many other public institutions at home and abroad have also sent their publications :—The Royal Society of Edinburgh ; the Royal Scottish Geographical Society ; the Society of Scottish Antiquaries ; the Royal Observatory, Edinburgh ; the Physical Society, Edinburgh ; the Church of Scotland ; the Highland and Agricultural Society; the Fishery Board for Scotland; the Royal Irish Academy ; the Royal Academy of Medicine, Ireland ; the British Museum; the Science and Art Department, South Kensington ; the British Association for the Advancement of Science ; the Royal Geographical Society, London ; the Astronomical Society, London; the Greenwich Observatory; the Musée Guimet ; the Smithsonian Institution ; the United States National Museum ; the Library of the Surgeon-General's Office ; the Museum of Comparative Zoology, Harvard ; the New York State Museum ; the Royal Society, Victoria ; the Australian Museum, Sydney ; the New Zealand Institute ; the Canadian Institute ; the Geological Survey of Canada ; the Geological Survey of India ; the Archæological Survey of India ; the Geological Survey of the United States ; the Geological Survey of Minnesota ; The Geological Survey of Missouri ; the Department of Agriculture, Michigan ; the Geological Survey of Iowa ; Institution of Civil Engineers ; Gaelic Society of Inverness ; the Trustees of the Baird Lectures ; the Trustees of the Hibbert Lectures ; the Polled Cattle Society ; the Suffolk Sheep Society ; the Clydesdale Horse Society ; &c., &c.

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Dr W. G. Macpherson—Annual Reports (1891-1895) Public Health of Gibraltar.

Mr J. M. Clark—The Functions of a Great University.

Mr A. D. Weld-French—County Records of the Surnames of Francus, Franceis, French, in England A.D. 1100-1350.

Mr A. Young—Theatre Panics and their Cure.

ABSTRACT OF THE ACCOUNTS OF
The University of Edinburgh
FOR THE YEAR ENDING 31ST AUGUST 1895.

CAPITAL.

I. General University Fund:—					
Funds at beginning of year				£69,415	11 2
Added during year—					
Surplus of Revenue over Expenditure for year				513	7 1
				£69,928	18 3
II. Funds partly or wholly unappropriated to particular purposes:—					
Funds at beginning of year		£67,995	2 0		
Added during year—					
Legacy by the late Dr Philip Nelson to the University Building Fund	£50 0 0				
Estimated capitalised value of Annuity of £1,745, 5s. 4d., payable to the University under the Edinburgh Corporation Stock Act, 1894, in continuation of an Annuity of the same amount formerly paid by the Leith Dock Commissioners, but not capitalised in the University Accounts	58,175 11 0				
Surplus of Revenue over Expenditure for year	371 14 8				
	£58,597 5 8				
less Amount of Accumulations of Revenue of Bursaries formerly charged upon the Annuity from the Leith Dock Commissioners above referred to, now transferred to separate accounts for these Bursaries	1,402 7 7				
		57,194	18 1		
				£125,190	0 1
	Carry forward,			£195,118	18 4

					Brought forward,		£195,118	18
III. Funds appropriated to Particular Purposes other than Bursaries, Scholarships, Fellowships, and Prizes:—								
Funds at beginning of year . . .				£111,643	15	2		
Added during year—								
Profit on realising City of Edinburgh Bonds . .	£585	0	0					
Surplus on Pension Fund .	2,450	10	8					
Surplus of Revenue over Expenditure	108	3	9					
				3,143	14	5		
							114,787	9
IV. Funds for Bursaries, Scholarships, Fellowships, and Prizes:—								
Funds at beginning of year . . .				£287,370	18	5		
Added during year—								
Estimated capitalised value of Annuity of £424, 14s. 8d., payable to the University for Bursaries under the Edinburgh Corporation Stock Act, 1894, in continuation of an Annuity of the same amount formerly paid by the Leith Dock Commissioners, but not capitalised in the University Accounts .	£14,157	15	4					
Amount of Accumulations of Revenue of Bursaries formerly charged upon the Leith Dock Annuity above referred to, now transferred to separate accounts for these Bursaries under this head	1,402	7	7					
Profit in realising City of Edinburgh Bonds . .	220	14	0					
Blair Bursary in Arts, formerly under the management of the Blair Trustees, now transferred to the University Court	415	10	10					
Carry forward,	£16,196	7	9	£287,370	18	5	£309,906	7

Brought forward,	£10,196	7	9	£287,370	18	5	£309,906	7	11
Balance of the Residue of the Estate of the late Signor Theophile Bucher for the foundation and endowment of a scholarship in the Faculty of Music . .	913	9	8						
Payment on account of a Legacy by the late Mrs Harriet E. Morrison, for the foundation and endowment of the Mackenzie (Stornoway) Bursary in the Faculty of Arts . .	902	13	0						
Legacy by the late George Scott, Esq., for the foundation and endowment of a Travelling Scholarship in the Faculty of Arts . .	1,000	0	0						
Sum received from Dr Gunning, being unapplied interest on Bond for £5000 granted by him in favour of the University on 6th March 1890, for the institution of Medical Prizes, which are presently paid by Dr Gunning through his own Agents	295	1	1						
Surplus of Revenue over Expenditure for year . .	2,206	12	9						
				21,514	4	3			
							308,885	2	8
ESKBANK FEU-DUTIES—CASUALTY FUND.									
Fund at beginning of year				£235	6	2			
Added during the year :—									
Surplus of Revenue over Expenditure for year				18	1	1			
							253	7	3
Total Funds at 31st August 1895 . . .							£619,044	17	10

NOTE.—The above Funds are stated at their book value or cost price. The market value of the Funds at the 31st August 1895 exceeded the book value by £43,500. 17s. 4d. No notice is taken above of the University Buildings, New Medical School, Music Class Room, Principal's Official Residence, and Lecture Hall in Park Place, or of the Library, Museum, and Furnishings of the University, as the values of these are not known.

REVENUE AND EXPENDITURE.

I. General University Fund.

Revenue.				Revenue.			Expenditu
1. Matriculation Fees				£3,057	12	0	...
2. Entrance Fees from Students not matriculated				19	5	0	
3. Fees in lieu of Matriculation Fees				30	9	0	
4. Preliminary Examination Fees				376	11	6	
5. Graduation Fees:—							
(1) Arts	£616	6	0				
(2) Science	228	17	6				
(3) Medicine	6,426	0	0				
(4) Divinity	36	15	0				
(5) Law	63	0	0				
(6) Music	6	6	0				
				7,377	4	6	
6. Fees of Registration of Members of General Council				314	0	0	
7. Fees of Access to Library				49	17	6	
8. Income from Accumulations of the General University Fund				2,242	12	9	
9. Income from Funds bequeathed for general purposes:—							
(1) Straton Fund	£446	1	6				
(2) Cox Fund	69	7	10				
(3) Gibson Fund	64	7	0				
				579	16	4	
10. Income from Funds partly appropriated to particular purposes, the Surplus Income of which falls to general purposes:—							
(1) Leith Harbour Annuity Fund	£659	5	8				
(2) Reid Fund	590	9	2				
(3) Baxter Salary Fund	2	18	11				
				1,252	13	9	
11. Income from Funds specifically appropriated by Deed of Endowment to Class Expenses:—							
(1) Fund for Chair of Engineering	£23	4	0				
(2) Fund for Chair of Geology	40	10	1				
(3) Fund for Chair of Fine Art	40	16	10				
Carry forward,	£104	10	11	£15,300	2	4	£ ..

		Revenue.	Expenditure.
Brought forward,	£104 10 11	£15,300 2 4	...
(4) Fund for Chair of Commercial and Political Economy . . .	74 0 0		
(5) Gilchrist Fund for purchase of apparatus .	79 15 0		
		258 5 11	
Income from Parliamentary Grant . .		25,870 0 0	
Income from Endowment of Chairs in the Faculty of Divinity		252 8 2	
Surplus on Fee Fund		2,199 9 3	
Royalty from Publisher of University Calendar		100 0 0	
Fees from Societies for Use of Rooms, &c. .		30 1 6	
		£44,010 7 2	
Expenditure.			
Expenses of Administration :—			
(1) University Court		..	£843 6 1
(2) Senatus Academicus		...	1,817 6 0
(3) General Council		...	202 9 3
(4) Curators of Patronage		...	18 8 3
(5) Editing University Calendar . . .		...	50 0 0
(6) Students' Representative Council . .		...	35 0 0
(7) Factor		...	869 12 8
(8) Law Agents		...	69 15 8
(9) Auditor		...	50 19 0
			£3,956 16 11
Salaries to Principal and Professors :—			
(1) Salary to Principal in accordance with Section III. of Ordinance No. 27 of the Scottish Universities Commissioners	£1,048 18 0		
(2) Salaries to Professors in accordance with Section VII., Subsection 1 (*b*), of said Ordinance .	4,257 16 1		
(3) Salaries to Professors in accordance with Section VII., Subsection 2, of said Ordinance . .	1,327 16 10		
(4) Salaries to Professors in accordance with Sections IX. and XI., Sub-			
Carry forward,	£6,634 10 11	£44,010 7 2	£3,956 16 11

			Revenue.	Expenditu
Brought forward, section 2 (*d*), of said Ordinance . . .	£6,634 10 11		£44,010 7 2	£3,956 16
(5) Salaries to Professors in the Faculty of Divinity in accordance with Section XI., Sub-section 2, (*e*) of said Ordinance .	3,542 0 0			
	452 8 2			
				10,628 19
3. Provision for Pensions to Retired Professors .				5,000 0
4. Upkeep of Buildings :—				
(1) Buildings and Furnishings	£3,248 18 0			
(2) Lighting, Heating, and Cleaning . . .	1,344 11 5			
(3) Public Burdens and Feu-Duties . . .	469 16 0			
(4) Insurance . . .	213 4 2			
				5,276 9
5. Equipment and Upkeep of Library . .				2,620 5
6. Equipment and Upkeep of Museums . .				415 0
7. Equipment and Upkeep of Laboratories, including Class Expenses				2,751 12
8. Lecturers and Assistants				8,593 12
9. Examiners				2,547
10. Service				1,132 12
11. Class Medals and Prizes . . .				296 2
12. Graduation Expenses				190 0
13. Incidental Expenses and Grants . . .				88 4
			£44,010 7 2	£43,497 0
Deduct Transfers to other Funds .			10,585 12 11	10,585 12
Carried to Abstract . .			£33,424 14 3	£32,911

II.—Fee Fund Account and Salaries Account :—

	Revenue.	Expendit
1. Fee Fund Account	£24,558 9 0	£24,558
2. Salaries Account	9,283 16 6	9,283 1
	£33,842 5 6	£33,842
Deduct Transfers to other Funds .	2,199 9 3	2,199
Carried to Abstract . .	£31,642 16 3	£31,642 1

II.—Funds Partly or Wholly Unappropriated to Particular Purposes:—

	Revenue.	Expenditure.
1. Annuity under the Edinburgh Corporation Stock Act, 1894	£1,687 0 10	£1,687 0 10
2. Reid Fund	1,593 15 10	1,593 15 10
3. Reid Professorship of Music, Assistants, and Expenses Fund	520 0 0	150 5 0
4. Straton Fund	446 1 6	446 1 6
5. Cox Fund	69 7 10	69 7 10
6. Gibson Fund	64 14 2	64 7 0
7. University Building Fund	1 12 6	...
	£4,382 12 8	£4,010 18 0
Deduct Transfers to other Funds	3,231 4 10	3,231 4 10
Carried to Abstract	£1,151 7 10	£779 13 2

IV.—Funds appropriated to particular purposes other than Bursaries, Scholarships, Fellowships, and Prizes.

	Revenue.	Expenditure.
1. Baxter Salary Fund	£583 13 6	£583 13 6
2. Bell Chair of Education	361 12 0	361 11 10
3. Celtic Chair	514 15 2	514 14 10
4. Chair of Commercial and Political Economy	524 0 0	524 0 0
5. Chair of Engineering, viz.:—		
(1) Fund for Professor's Salary	193 6 8	193 6 8
(2) Fund for Expenses of the Chair	23 4 0	23 4 0
6. Chair or Lectureship on Forestry	215 5 8	213 12 2
7. Gilchrist Fund	79 15 0	79 15 0
8. Gifford Lectureship	741 19 7	741 9 4
9. Muir Chair of Sanskrit	201 17 7	201 17 8
10. Murchison Chair of Geology, viz.:—		
(1) Fund for Professor's Salary	181 0 6	181 0 4
(2) Fund for Expenses of the Chair	36 3 8	36 3 8
11. Pulteney Chair of Agriculture	18 2 7	36 5 0
12. Chair of Public Health	141 7 6	...
13. Pension Fund	5,058 0 0	2,607 9 4
14. Steven Lectureship on Agriculture	94 5 0	94 5 0
15. Thomson Funds, viz.:—		
(1) Fund for Salary of Professor of Natural History.	17 5 8	34 11 4
(2) Fund for Expenses of Chair of Geology	4 6 5	4 6 5
Carry forward,	£8,990 0 6	£6,431 6 1

	Revenue.	Expenditu
Brought forward,	£8,990 0 6	£6431 6
16. Watson Gordon Professorship of Fine Art., viz. :—		
(1) Fund for Professor's Salary .	426 9 4	426 9
(2) Fund for Expenses of the Chair .	40 16 10	40 16
17. Lectures on Agriculture to Rural Schoolmasters	450 0 0	450 0
18. Chair of Conveyancing . . .	105 0 0	105 0
	£10,012 6 8	£7453 12
Deduct Transfers to other Funds	3,330 2 11	3330 2
Carried to Abstract	£6,682 3 9	£4123 9

V.—Funds for Bursaries, Scholarships, Fellowships, and Prizes

	Revenue.	Expenditu
1. Aitken Scholarship	£93 17 0	£57 8
2. Ardvorlich Bursary	15 9 4	15 9
3. Neil Arnott Prize	40 12 0	40 13
4. Neil Arnott Scholarship . . .	37 4 4	37 4
5. Baxter Mathematical and Philosophical Scholarships	119 9 6	29 17
6. Baxter Natural and Physical Science Scholarships	144 11 2	108 8
7. Misses Baxter of Balgavie's Scholarships	156 3 0	78 17
8. John Edward Baxter Scholarships, viz. :—		
(1) Fund for Scholarships . .	250 17 8	209 1
(2) Fund for Examiners' Fees . .	11 4 8	...
9. Bruce of Grangehill and Falkland Bursaries and Scholarships . .	497 9 2	456 6
10. Beaney Prize	36 5 0	72 12
11. Buchanan Scholarship	39 3 7	39 3
12. Buchanan Bursary	22 1 4	...
13. Bucher Scholarship	27 5 8	18 6
14. Bayne Bursary	24 3 4	...
15. Brown Bursaries	24 3 4	24 3
16. Blair Arts Bursary	4 13 0	7 5
17. Cairns Bursary	18 7 4	18 6
18. Cameron Prize	90 2 10	8 8
19. Dr John Aitken Carlyle's Medical Bursaries	54 2 8	40 12
20. Cousin Prize	14 4 8	14 4
21. Bailie Cousin Bursary	27 1 4	13 10
22. Cobb Scholarship	31 8 4	15 14
23. Crichton Bursaries, and Scholarships .	1019 7 0	28 6
Carry forward,	£2799 7 3	£1334 1

		Revenue.			Expenditure.		
	Brought forward,	£2799	7	3	£1334	1	1
24.	Drummond Scholarship, viz. :—						
	(1) Fund for Scholarship	102	2	0	102	2	2
	(2) Fund for Examiners' Fees	7	5	0	...		
25.	William Dickson Travelling Fund	85	1	4	105	0	0
26.	Dundas Bursaries	41	0	10	41	0	10
27.	Dalgleish and Macmorran Bursary	13	8	6	13	8	6
28.	Edinburgh University Endowment Association's Arts Bursaries	120	0	0	100	0	0
29.	Ettles' Divinity Scholarships	110	3	2	73	8	10
30.	Ettles' Medical Scholarship	33	16	8	67	15	11
31.	Ellis Prize	23	19	10	...		
32.	Exhibition of 1851 Science Scholarships	200	0	0	200	0	0
33.	Falconer Memorial Fellowship, viz.:—						
	(1) Fund for Fellowship	108	6	2	108	5	8
	(2) Fund for Examiners' Fees	2	8	4	12	12	0
34.	Fothringham and Forrest Bursaries	38	0	0	44	16	3
35.	James Fairbairn Scholarship	32	7	2	32	7	0
36.	Freeland Barbour Fellowship	48	7	5	48	11	7
37.	Fraser Bursaries	42	1	0	34	16	0
38.	Donald Fraser Bursary	48	6	8	48	7	8
39.	Ford Bursaries	32	4	6	32	4	6
40.	Glover Divinity Scholarship	36	12	10	36	12	8
41.	Gray Scholarships	83	17	2	62	17	11
42.	Guthrie Fellowship	95	6	8	101	3	2
43.	Grierson Bursaries	331	9	8	290	0	8
44.	Gunning Scholarships	1	9	7	...		
45.	Gunning Medical Prizes	...			...		
46.	Goodsir Memorial Prize.	62	0	0	69	19	6
47.	Hamilton Philosophical Fellowship, viz.:—						
	(1) Fund for Fellowship	94	9	10	94	9	10
	(2) Fund for Examiners' Fees	5	1	6	...		
48.	Harrison Bursary	32	2	10	32	2	10
49.	Hope Prize	69	16	10	49	0	0
50.	Robert Hunter Bursaries	32	12	6	...		
51.	Jardine Bursary	42	3	0	58	6	8
52.	Jardine of Thorlieshope Bursaries	145	10	4	183	18	10
53.	Johnston of Harthope Bursary	15	14	2	19	7	4
54.	Jeffrey Scholarships	141	7	6	149	15	6
55.	Robert Johnston Bursaries	54	12	4	36	5	0
56.	Archibald Johnstone Bursary	12	13	6	10	14	10
57.	David Kidd Divinity Scholarship	33	4	8	16	12	0
58.	Kelland Memorial Prize	4	9	2	4	9	0
59.	General Lang's Bequest	13	3	0	...		
60.	Lockerby Bursary	30	19	8	30	19	8
	Carry forward,	£5227	2	7	£3645	13	5

		Revenue.			Expenditure.		
	Brought forward, .	£5227	2	7	£3645	13	5
61.	Lorimer Travelling Scholarship . .	36	10	0	...		
62.	Leckie Mactier Fellowship . . .	77	6	8	77	6	8
63.	Leighton and Struthers Bursary . .	21	16	9	...		
64.	Charles Maclaren Scholarship, viz.:—						
	(1) Fund for Scholarship . .	105	6	6	...		
	(2) Fund for Examiners' Fees .	7	6	10	...		
65.	Maxton Scholarship	40	19	8	40	19	8
66.	Mackenzie Classical Scholarship . .	117	9	0	117	9	0
67.	Macpherson Bursaries	83	0	4	83	0	0
68.	Marshall Bursary	31	8	4	31	8	4
69.	Mackenzie Bursaries in Anatomy . .	38	13	4	38	13	4
70.	Mackinnon Bursaries	59	9	0	18	2	6
71.	Mann Bursaries	77	6	8	103	2	4
72.	Mackie Bursaries	58	0	0	58	0	0
73.	Maclaurin Bursary	71	1	0	71	1	0
74.	Maule Bursaries	77	6	8	77	6	8
75.	Milner Fothergill Prize . . .	9	13	4	...		
76.	Muirhead Prize	16	18	4	16	18	4
77.	M'Lurg and Penman Bursary . .	19	13	2	34	12	0
78.	Miller Bursary	23	4	0	23	4	0
79.	Mitchell and Shortt Bursary . .	14	6	10	12	8	2
80.	Mackenzie (Stornoway) Bursary . .	15	18	0	8	10	6
81.	Newton Bursaries	84	8	6	63	6	5
82.	Nairne Bursary	16	2	4	16	2	4
83.	Prizes in Sanskrit		...		3	3	0
84.	Pitt Club Classical Scholarship . .	55	12	6	55	12	0
85.	Pitt Club Theological Scholarship .	103	19	6	103	19	6
86.	Patrick Bursaries	91	18	3	90	14	3
87.	Pattison Bursary	10	19	10	2	11	0
88.	Patterson Bursary	15	11	8	15	12	0
89.	Bailie John Penman Bursary . .	14	5	2	14	5	2
90.	Rev. John Penman High School Bursaries	8	11	2	...		
91.	Pringle and Wardrop Bursary . .	16	12	6	6	3	7
92.	Rhind Scholarships	170	3	2	128	2	9
93.	Renton Bursary in Arts . . .	18	16	6	18	16	6
94.	Renton Bursary in Divinity . . .	19	5	0	19	4	4
95.	Ramsay Bursary in Arts . . .	10	14	10	10	14	10
96.	Ramsay Bursary in Divinity . .	16	2	4	16	2	4
97.	Horsliehill Scott Bursary . . .	64	8	0	64	8	0
98.	Shaw Philosophical Fellowship . .	135	9	2	135	9	2
99.	Shortt Bursary		...		...		
100.	Steven of Bellahouston Scholarship .	72	10	0	72	10	0
101.	Syme Surgical Fellowship, viz. :—						
	(1) Fund for Fellowship . . .	101	10	8	50	15	3
	(2) Fund for Examiners' Fees .	8	11	0	16	16	0
	Carry forward,	£7265	9	1	£5362	4	4

	Revenue.	Expenditure.
Brought forward,	£7,265 9 1	£5,362 4 4
102. Scott and Dunbar Prize	26 18 4	24 19 1
103. Dobbie Smith Prize	4 17 6	...
104. Mackay Smith Scholarships, viz. :—		
(1) Fund for Scholarships	96 13 4	84 11 8
(2) Fund for Examiners' Fees	3 4 0	...
105. Stark Scholarship	54 2 8	54 4 6
106. James Scott Scholarship	41 1 8	41 1 8
107. Stewart Bursaries	34 16 0	19 6 8
108. George Scott Scholarship	3 8 5	6 9 0
109. Tarsappie Bursary	2 12 3	...
110. Trevelyan Scholarship	30 3 2	...
111. Trotter and Penman Bursary	12 5 7	...
112. Vans Dunlop Scholarships	2,314 4 3	2,153 0 3
113. Wightman Prize	11 12 0	...
114. Robert Wilson Prize	8 10 2	9 13 11
115. Webster Bursaries	129 1 0	80 12 10
116. John Welsh Bursaries	194 15 2	204 10 3
117. Whitelaw Bursaries	68 2 4	79 10 0
118. King William III. Bursaries	50 0 0	25 0 0
119. Weir, Jenkins, Hepburn, and Lightbody Bursary	11 0 3	11 0 3
120. Wight, M'Call, and Christie Bursary	12 12 5	12 12 5
Carried to Abstract	£10,375 9 7	£8,168 16 10

VI. Eskbank Feu-Duties—Casualty Fund.

	Revenue.	Expenditure.
Total amount of Feu-Duties and Expenditure therefrom	£494 18 0	£476 16 11
Deduct transfer to other Funds	461 1 2	461 1 2
Carried to Abstract	£33 16 10	£15 15 9

ABSTRACT OF REVENUE AND EXPENDITURE.

	Revenue.	Expenditure.
I. General University Fund	£33,424 14 3	£32,911 7 2
II. Fee Fund Account and Salaries Account	31,642 16 3	31,642 16 3
III. Funds partly or wholly unappropriated to particular Purposes	1,151 7 10	779 13 2
IV. Funds appropriated to particular Purposes other than Bursaries, Scholarships, Fellowships, and Prizes	6,682 3 9	4,123 9 4
V. Funds for Bursaries, Scholarships, Fellowships, and Prizes	10,375 9 7	8,168 16 10
VI. Eskbank Feu-Duties—Casualty Fund	33 16 10	15 15 9
Total Revenue and Expenditure,	£83,310 8 6	£77,641 18 6

The University Court.

ABSTRACT OF THE PROCEEDINGS OF THE UNIVERSITY COURT, FROM 1ST MAY 1895 TO 1ST MAY 1896.

MONDAY, 20TH MAY 1895.—The Minutes of last meeting were submitted and approved.

A letter was read from Mr Arthur M. Goodhart in acknowledgment of the letter of sympathy which the Court had addressed to the Hon. Mrs Goodhart in her late bereavement.

On the motion of the Principal, the Court instructed the Secretary to send an expression of their sympathy to the family of the late Dr Hugh Cleghorn, F.R.S.E., of Stravithie, Fife, who had been a generous benefactor of the University in connection with the foundation of the Forestry Lectureship.

It was intimated that the Commissioners' Ordinances Nos. 135 to 137 and 139 to 144 had been laid before both Houses of Parliament.

On the recommendation of Professor Rutherford, Mr Robert Hutcheson, M.B., was appointed University Assistant in Physiological Chemistry for the remainder of the current academical year.

The Court approved of certain changes in the teaching staff of the Edinburgh School of Medicine for Women, intimated by Dr Jex Blake.

The Court agreed to a request by Mr S. Henbest Capper, M.A., &c., that the special course on "Architectural Styles in Britain," which the Court had permitted him to deliver this summer, should be deferred till the summer session 1896. A letter was read from Mr G. W. Burnet, requesting that the course of lectures which he was to deliver this summer on "International Private Law" should be deferred until next winter session, on the ground of ill-health. The Court granted this request.

A letter was read from the Siamese Minister, to the effect that His Majesty the King of Siam had been graciously pleased to send, for acceptance by the University of Edinburgh, a copy of the Phra Tripitaka, consisting of nineteen volumes, printed in the Pali language, but in Siamese characters. The Secretary was instructed to convey to His Majesty the King of Siam, through the Siamese Minister, the respectful thanks of the Court.

A letter was read from the Secretary of the Highland and Agricultural Society, intimating a grant by the Society of £50 towards the Forestry Lectureship for the current year.

On the recommendation of the Finance Committee, the Court fixed the fee for the reappearance of Candidates who fail to pass the examinations for the degrees of M.D. and Ch.M., under the new statutes, at £5, 5s. for each of these degrees.

The Court fixed the fee for a second attendance on the class of Medical Jurisprudence at £3, 3s., as recommended by the Finance Committee.

The Finance Committee reported that they had passed for payment various awards of bursaries, &c., fees to examiners, and library accounts.

The Works Committee submitted their report on repairs and jobbing work for the past half-year.

The Court sanctioned the delivery, during the summer session, of a course of lectures on Pathological Bacteriology by Dr Robert Muir, similar to that which he had given in the winter.

Monday, 17th June 1895.—The Minutes of last meeting were submitted and approved.

It was intimated that copies had been received of Orders in Council approving of Ordinances (Edinburgh No. 10—Regulations for Degrees in Medicine, supplementary to Ordinance No. 16); No. 57 (General No. 19—Regulations as to Bursaries, Scholarships, and Fellowships); No. 58 (General No. 20—Regulations for admitting women to Bursaries, Scholarships, and Fellowships.)

There was laid before the Court an application from Professor David Masson for permission to retire from the Chair of Rhetoric and English Literature which he had held since 1865. The Court, in resolving to accept Professor Masson's resignation, directed that it should be entered in their minutes that they did so with great regret. It was resolved that the resignation should take effect as from 31st August next.

A question raised by Professor Calderwood as to the rights of Professors appointed prior to 1889 to take the benefit of Ordinance No. 32 (Pensions to Principals and Professors) was remitted to the Business and Law Committee.

The Court continued the appointment of Mr J. M. Cotterill, M.B., as an Additional Examiner in Clinical Surgery till the 31st December.

On the recommendation of the Senatus, the Court agreed to make provision for the instruction of women in advanced courses qualifying for Graduation in Science within the University in the Departments of Zoology and Botany.

On the recommendation of the Senatus, the Court resolved, in terms of Ordinance No. 16, vii. (5), to grant a general recognition to all Hospitals which satisfy the conditions of the section referred to as to number of patients and medical and surgical staff, and authorised the Dean of the Faculty of Medicine to accept the certificate of any hospital on being satisfied that it fulfilled these conditions.

On the recommendation of the Senatus, the Court recognised the course of lectures on Botany given by Mr Robert Turnbull, B.Sc., in the New School of Medicine, Bristo Street, as qualifying women students for Graduation in Arts in terms of Ordinance No. 18, iii. (2.)

The Business and Law Committee reported that they had instituted the Lectureship in Civil and Criminal Procedure and the Law of Evidence in Scotland, as from 15th October next, on the basis of the constitution approved of by the three legal bodies who had generously contributed to the endowment of the lectureship—viz., the Faculty of Advocates, the Society of Writers to H.M. Signet, and the Society of Solicitors before the Supreme Courts.

The Court resolved that Bachelors of Science who, having graduated as such under the old regulations, had paid a fee of £10, 10s., should only be required to pay a fee of £5, 5s. for their D.Sc. Degree, although they must satisfy otherwise the conditions imposed by the new regulations before taking their D.Sc. Degree.

The Finance Committee reported that they had passed various accounts, &c., for payment.

The Court approved, with slight modification, of the amendments proposed by the Draft Ordinances Committee on Draft Ordinance (General No. 34, Regulations with regard to Matriculated Students.)

The Court granted permission to the Incorporated Society of Musicians to hold their annual conference during the Christmas vacation in the Music Class-Room.

Monday, 15th July 1895.—A letter was read from Professor David Masson, expressing to the Court his very grateful sense of the honour done him by their resolution in connection with his retirement, and of the kind cordiality of the terms in which that resolution had been communicated to him.

It was intimated that copies had been received of Orders in Council, approving of Ordinances No. 59 (General No. 21—Supplementary to Ordinance No. 9; General No. 4—General Council); No. 60 (General No. 22—Regulations for the Students' Representative Council); No. 61 (General No. 23—Regulations for the Encouragement of Special Study and Research, &c.); No. 62 (General No. 24—Regulations for Higher Degrees in Arts and Science); No. 63 (General No. 25—Regulations for the Degree of Bachelor of Divinity); No. 64 (General No. 26—Regulations as to Custody and Management of Libraries); No. 65 (General No. 27—Regulations as to Lecturers, supplementary to Ordinance No. 17); No 66 (General No. 28—Regulation as to Examiners.)

A letter was read from the Secretary, Scottish Universities Commission, informing the Court that the Finance Act, 1895, including the provision for the repeal of the stamp duty on the M.D. Degree, is now law.

A letter was read from Major Sprot thanking the Court for the letter

of sympathy which they had sent him on the occasion of the death of his uncle, Dr Hugh Cleghorn, F.R.S.E.

The University Assistants in several of the Departments were appointed for the academical year 1895-6.

The Court appointed the following gentlemen to be University Lecturers for the academical year 1895-6 in the subjects specified, viz., Mr A. D. Thomson, M.A. (Greek); Mr R. P. Hardie, M.A. (Ancient Philosophy); Mr C. M. Douglas, D.Sc. (Psychology); Mr Charles Tweedie, M.A. (Mathematics); Mr William Peddie, D.Sc. (Natural Philosophy); Mr John Beard, D.Sc. (Embryology); Mr Leonard Dobbin, Ph.D. (Chemical Theory); Mr H. Marshall, D.Sc. (Mineralogy and Crystallography); Mr J. S. Flett, B.Sc. (Petrology); Mr W. H. Kerr, M.A. (Geometrical and Mechanical Drawing); Dr Joseph Tillie (Experimental Pharmacology); Dr Robert Muir (Pathological Bacteriology); Dr E. W. Carlier (Experimental Physiology); Dr David Hepburn (Regional Anatomy); Dr A. P. Aitken (Agricultural Chemistry); Dr W. G. Smith (Plant Physiology.)

The Court appointed Mr J. J. Cook, LL.B., advocate, to be Lecturer in Civil and Criminal Procedure for a period of five years from 15th October next.

The Court elected Mr James C. Smith, M.A. (Additional Examiner in Classics); Mr D. B. Mair, M.A. (Additional Examiner in Mathematics); Mr Otto Schlapp (Lecturer in German), to represent the University on the Joint Board of Examiners for the year from 1st February 1896.

The following Additional Examiners were appointed:—Mr A. S. Murray, Head of the Department of Antiquities, British Museum (Classical Archæology); Professor Middleton (Archæology and History of Art); Mr W. E. Plummer, M.A., Director of the Liverpool Observatory (Astronomy); Mr John Horne, of H.M. Geological Survey (Geology); Mr John Downie, M.A. (History); Dr Maurice Paterson (Schoolmaster's Diploma).

On the recommendation of the Senatus, the Court recognised Dr D. Campbell Black, Anderson's College Medical School, Glasgow, as a teacher whose course of instruction in Physiology qualifies for Graduation in Medicine.

On the recommendation of the Senatus, the Court recognised Dundee University College as an Institution the Courses of Instruction in which qualify for Graduation in Science.

The Court adopted the recommendations of the Finance Committee as to payment of accounts, &c., and the recommendations of the Works Committee as to improvements.

Monday, 21st October 1895.—The Minutes of last meeting were submitted and approved.

It was intimated that copies of Orders in Council had been received approving of Ordinances Nos. 118 to 129 (Edinburgh, Nos. 11 to 22), Bursary Foundations, &c.; and that Ordinance No. 147 (General, No.

32—Regulations with regard to Matriculated Students) had been laid before Parliament.

The Commissioners' Draft Ordinance (General, No. 35—Regulations for Degrees in Arts, supplementary to Ordinances Nos. 11 and 44) was remitted to the Draft Ordinances Committee.

It was intimated that Sheriff Mackay's term of office as Chancellor's Assessor expires on 14th November next, and that he had been reappointed by the Chancellor.

The Secretary was instructed to advertise in due course the Additional Examinerships which fall vacant on 31st December next in (1) Scots Law, Conveyancing, and Medical Jurisprudence; and (2) Clinical Surgery. The Members of the Standing Committees of the Court were reappointed for the current academical year.

The Court's Representatives on the Library and Museum Committees were reappointed for the same period.

Professor Saintsbury was appointed Examiner in English on the Joint Board of Examiners for the year from 1st February next.

Dr Rost was appointed Additional Examiner in Sanscrit; and Mr J. R. N. Macphail, M.A., LL.B., advocate, was appointed Additional Examiner in Political Economy for the current academical year.

The following gentlemen were appointed University Lecturers:—Mr G. Gregory Smith, M.A. (English); and Mr F. R. Jamieson, M.A. (Latin).

The Rev. Alexander Horn, B.D., was appointed University Assistant in Divinity, in room of the Rev. Dr Hastie, resigned. On the resignation of Dr Gustav Mann, Mr J. Purves Stewart, M.B., was appointed an Assistant in Physiology. Dr Dowden was appointed Tutor in Clinical Surgery, in room of Dr Logan Turner resigned. A Committee appointed, with powers, reported that they had renewed the recognition of the Edinburgh School of Medicine for Women and the Edinburgh College of Medicine for Women for another year on the original conditions.

The Court agreed that the Pathological Gallery of the Anatomical Museum should be open on one day in the week for the use of women students in medicine.

The Court agreed, in terms of Ordinance 18, ii., to admit women students to the advanced courses in Botany and Natural History for purposes of graduation in Science, and further resolved to admit women students of medicine to the class of Physics for purposes of graduation in Medicine.

On the recommendation of the Senatus, the Court recognised Professor Selby, University College, Cardiff, as a teacher whose course of instruction in Physics qualifies for Graduation in Medicine, and Mr E. S. Fry, M.B., Edinburgh, as a teacher of Practical Materia Medica. The Court recognised the following Science Courses in the Heriot-Watt College:—Mechanics and Physics, as equivalent to one course in Natural Philosophy, qualifying for the first B.Sc. examination in Pure Science; Advanced Chemistry and Chemical Laboratory as qualifying

for the the final B.Sc. examination ; Electricity (Pure and Applied). Engineering Laboratory Practice (Mechanical or Electrical), as qualifying for the Degree of B.Sc. in Engineering.

On the recommendation of the Senatus, the Court approved of the delivery by Professor Saintsbury of two honours half-courses in English during the second half of the winter session—(1) on the Theory of Verse and Prose in English ; (2) the Arthurian Legend. Either of these half-courses may be combined with some other half-course in the same department so as to form a full course for honours. The fee for each half-course was fixed at £2, 2s.

The Court approved of a recommendation of the Senatus that the term of residence and practical work at a farm required by Section IV. (3) of Ordinance No. 22, Degrees in Agriculture, should be not less than twelve months, and at a farm of a suitable character.

The Senatus intimated that Professors Saintsbury and Hardie had been inducted on 15th inst.

The Finance Committee reported accounts passed for payment.

On the recommendation of the Works Committee, the Court approved of certain alterations and improvements in the class-rooms, &c.

Various questions recommended by the Committee on the Medical Education of Women were approved.

The Court resolved to recognise the University of Sydney as a medical school, the medical classes in which qualify for Graduation in Medicine in this University both by men and by women, in terms of Ordinances 16, viii. (2), and 18, iii. (4).

Monday, 18th November 1895.—The Minutes of last meeting were submitted and approved.

A letter was read from Sir Colin Scott Moncrieff, Under Secretary for Scotland, inquiring if the University would accept copies of the French Government's publications of their "Mission Archéologique Française du Caire." The Court accepted the proposed gift, with thanks to the donor.

It was intimated that Dr Heron Watson had been re-elected, and that Dr Joseph Bell had been elected by the General Council as Assessors in the University Court.

Dr Joseph Bell was appointed a member of the Works and Draft Ordinances Committees.

Mr T. G. Dickson, C.A., was appointed to audit the Court's Report on the State of the Finances for 1894-95.

Mr D. A. Welsh, M.B., was appointed Clinical Medicine Tutor in room of Dr Tillie, resigned.

On the recommendation of the Senatus, the 5s. entrance fee in lieu of matriculation was made applicable to Dr Sarolea's advanced course of fifty lectures on Italian language and literature, &c., subject to the provisions of Ordinance 50, ii.

The Finance Committee's Report on Lectureships, Assistants and

Class Expenses, for the current academical year, was submitted and approved as adjusted. Various accounts, awards by Senatus of Bursaries, &c., were submitted by the Finance Committee, and passed for payment.

The recommendations of the Works Committee as to alterations, repairs, &c., in several departments were approved. It was agreed that the 5s. entrance fee in lieu of matriculation should be made applicable to the non-qualifying courses conducted by the Professor of Celtic, subject to the provisions of Ordinance 50, ii.

The class returns for 1894-95 were submitted, and remitted to a committee for examination and report.

Monday, 16th December 1895.—The Minutes of last meeting were submitted and approved.

Subject to some slight alteration, the Court approved of the regulations under which the Students' Representative Council now exists; the regulations thus approved becoming, in accordance with Ordinance No. 60, the constitution of the Council.

A letter from Dr Argyll Robertson was read, intimating his resignation of the Lectureship on Diseases of the Eye, an office which he had held during the last thirteen years.

Dr Joseph Bell was appointed a member of the Electing Body of the Steven Lectureship in Agriculture.

It was intimated that the Senatus had re-elected Professor Crum Brown as an Assessor in the University Court for four years from 30th ult.

Leave of absence, from the Christmas recess until the termination of the current session, was granted to the Professor of Clinical Surgery on account of the state of his health. The Court further approved of the recommendation of the Senatus that the Professor's duties should, during his absence, be discharged by Dr John Duncan.

The Court approved of the recommendation of the Senatus that Professor Prothero's Honours Course on "England and Europe, 1815-78," should be considered as one of the Honours Courses in connection with Honours in English.

On the recommendation of the Senatus, the Court approved of a proposed course of fifty lectures on Fermentation by A. Forbes Watson, B.Sc. The Court fixed the fee for the course at £2, 2s., and agreed that the 5s. entrance fee in lieu of matriculation should apply to it.

On the recommendation of the Senatus, and in order to meet the changes effected in the curriculum by the new ordinances, it was agreed to substitute the following regulations for those at present in force regarding the Vans Dunlop Scholarships in Medicine:—1. For students of the first year, a scholarship shall be offered for competition in the subjects of Chemistry, Physic, and Elementary Anatomy (with definition of the last subject), and one in the subjects of Botany and Zoology, to be competed for in July. 2. For students of the second

year, a scholarship in the subjects of Physiology (comprising the subjects as required for the second professional examination) and Surgery, the examination to be held in March. 3. For students of the third year, a scholarship on the subjects of Advanced Anatomy and Physiology, to be competed for in October, and a scholarship in Materia Medica (including Pharmacology), to be competed for in October. In the case of these two scholarships the examinations are to include practical tests in Dissecting, in Experimental Physiology, and in Experimental Pharmacology. In the case of each of the above scholarships special papers will be set for the written examinations. The general conditions of tenure of these scholarships will remain as at present.

It was also agreed that the Grierson Bursary in medicine, at present awarded on the results of a conjoint examination in Pathology and Materia Medica, shall in future be divided into two Bursaries, one of which shall be offered for competition to students of the third year on an examination in Materia Medica alone, and the other to students of the fourth year on an examination in Pathology alone.

The Court approved of a recommendation of the Senatus that remitted Candidates in the Faculty of Medicine who are required to reattend classes, and have taken any of these classes with extra-academical teachers, shall not again be admitted to examination unless the fees paid for further attendance have been, in the case of extra-academical classes in Edinburgh, the same as those charged for the corresponding classes within the University.

Applications by Mr J. R. Whitaker, M.B., Lecturer on Anatomy, and Dr F. W. N. Haultain, Lecturer on Midwifery, for continuance of recognition on change of teaching premises were granted. The application of Mr R. Barclay Ness, M.A., M.B., Anderson's College Medical School, Glasgow, for recognition as a teacher of Materia Medica and Practical Materia Medica was granted.

On the recommendation of the Senatus, the following request of the University of New Zealand was granted:—That graduates in Arts or Science of that University be exempted from examinations in Botany, Zoology, Physics, and Chemistry, required from candidates for Degrees in Medicine, provided that they have passed in these subjects as part of their Arts or Science course.

The report of the Finance Committee on the University accounts for the financial year from September 1, 1894, to August 31, 1895, with estimate of revenue and expenditure for 1895-96, was submitted and approved. An amendment suggested by the Draft Ordinances Committee on the Commissioners' Draft Ordinance (General No. 35—Regulations for Degrees in Arts, supplementary to Ordinances Nos. 11 and 44) was approved.

Mr F. P. Walton, LL.B., was appointed Additional Examiner in French and German for a period of four years from 1st January next.

It was intimated that £150, 13s. 10d. had been received from the

Royal Scottish Arboricultural Society, being a further payment on account of subscriptions and interest thereon collected by the Society towards the endowment of Forestry in the University.

Various accounts, fees to examiners, awards by Senatus of bursaries, &c., were submitted and passed for payment.

MONDAY, 13TH JANUARY 1896.—The Minutes of last meeting were submitted and approved.

The Court approved of a Minute expressive of their high appreciation of the manner in which Dr Argyll Robertson had performed the duties of the Lectureship on Diseases of the Eye during his tenure of office, resignation of which had been intimated at last meeting.

The Court appointed Mr George Berry, M.B., F.R.C.S., Ed., &c., Senior Ordinary Ophthalmic Surgeon in the Royal Infirmary, to the University Lectureship in Ophthalmology, vacant by the resignation of Dr Argyll Robertson.

The following Additional Examiners were appointed:—D. A. Stevenson, B.Sc., M.Inst.C.E. (Engineering); W. Owen Williams, F.R.C.V.S. (Veterinary Hygiene); Dr James O. Affleck (Medicine in its Bearings on Public Health); Sir A. C. Mackenzie, Mus. Doc. (Music).

It was intimated that £190 had been received from the Highland and Agricultural Society, being the amount of contributions collected by the Society towards the Endowment of Forestry in the University.

The Court's Reports on Statistics and on the State of the Finances of the University for 1894-95, under section 30 of "The Universities (Scotland) Act, 1889," were approved, and directed to be forwarded to the Secretary for Scotland.

The Court approved of the report of the Finance Committee on the remuneration of Additional Examiners in Arts and Science.

It was agreed that the fee payable by Candidates who select science subjects (Mathematics and Natural Philosophy not included) for Graduation in Arts shall be £1, 1s. for each of these subjects.

The Finance Committee's report as to fees exigible in respect of second, third, and subsequent attendances on the classes of the several Faculties was submitted and approved.

Awards of bursaries, &c., and accounts, which had been passed for payment, were reported.

Various reports submitted by the Works Committee were approved.

17TH FEBRUARY 1896.—The Minutes of last meeting were submitted and approved.

It was intimated that the Court's Reports on Statistics and on the State of the Finances of the University for 1894-95, under Section 30 of the Universities (Scotland) Act, 1889, had been forwarded to the Secretary for Scotland, and that receipt had been acknowledged.

The Right Hon. the Lord Justice-General was appointed a Curator

of Patronage for the statutory period in room of the Right Hon. the Lord Justice-Clerk, whose term of office expires on 26th current.

The following Additional Examiners were appointed :—(1) Mr Claude Phillips, London (Archæology and Art), and (2) Rev. Dr Masson, Edinburgh (Celtic), each for a period of four years as from 1st October last ; (3) Mr Arthur A. Macdonell, M.A., Deputy Professor of Sanscrit, Oxford (Sanscrit), in room of the late Dr Rost, for the remainder of the current academical year ; (4) Dr William Somerville, Durham College of Science, Newcastle-on-Tyne (Forestry), for four years from 1st January last ; (5) Mr A. T. Glegg, LL.B., advocate, Edinburgh, for three years from 1st January last ; (6) Dr John Duncan, and (7) Mr J. M. Cotterill, M.B., C.M. (Clinical Surgery), for a period not exceeding four years from 1st January last ; and (8) Dr Frederick Page, Newcastle-on-Tyne (Clinical Surgery), for four years from 1st January last.

The Court approved of the following recommendations of the Senatus :—(1) That the course of Political Economy be divided into two half-courses, qualifying for Graduation in Law, the fee for each half-course to be £2, 2s. ; (2) that a full Honours Course of fifty lectures on the English Language should be delivered by the Lecturer on English during the winter session, in place of the two Honours Half-Courses on English Literature and Language respectively, hitherto given in the winter session, the course to consist of two parts dealing respectively with the history of old and middle English (and English Palæography), and with old and middle English texts, fee £3, 3s. ; (3) that a course of twenty lectures on German literature (being part of the ordinary course in German), to be delivered once a week, may be attended separately—the Court fixed the fee at £1, 1s., and agreed that the 5s. entrance fee should apply ; (4) that the Course of Geology in summer be recognised as a half-course for Graduation in Arts ; (5) that the first half of the winter laboratory course in Mineralogy and Geology be recognised as qualifying for Graduation in Arts, fee £2, 2s. ; (6) that a half-course in Elementary Dynamics be delivered by the Lecturer on Applied Mathematics during the summer session, in place of the Course on Theory of Electricity and Magnetism, hitherto given in the summer session, fee £2, 2s.

The Court agreed to recognise the University of New Zealand, whose Science Courses shall qualify for Graduation in Science under Ordinance No. 12, section iv.

The Court agreed to recognise the degree of B.A. of Michigan University, U.S.A., as qualifying for admission to courses of study for Degrees in Law in this University.

A report by the Committee on Applications relating to graduation of women in medicine was submitted and approved.

The Finance Committee reported that the accounts and awards of bursaries, &c., had been passed for payment.

16TH MARCH 1896.—The Minutes of last meeting were submitted and approved.

It was reported that Ordinance No. 148 (General No. 33—Regulations for Degrees in Arts, supplementary to Ordinances 11 and 44) had been laid before Parliament on 28th ult. Draft Ordinance (General No. 36—Regulations as to Resignation of Professors and Lecturers) was referred to the Draft Ordinances Committee.

The Court approved of the report of the Committee appointed to investigate the conditions of Bursaries, Scholarships, and Fellowships founded prior to August 1864, in connection with the question of their being opened to women students, which was to the following effect :—(1) That the number of Foundations that come under the power of the Court and the number of Bursaries already appropriated to women students being taken into account, it is not desirable to open to competition, without restriction as to sex, any of the open Bursaries which have taken effect prior to 30th August 1864, with the exception of the Macpherson Bursaries, now conjoined in one Scholarship; and (2) that all Scholarships or Fellowships founded prior to 30th August 1864, and within the power of the Court, shall be open to competition without restriction as to sex.

It was reported that Dr William Fream had been re-elected Steven Lecturer in Agriculture for three years as from 29th November next.

The Court appointed Mr S. Henbest Capper, M.A., A.R.I.B.A., Edinburgh, Additional Examiner in Archæology and Art, and Miss E. A. Ormerod, F.E.S., Additional Examiner in Agricultural Entomology, both for the current academical year. The Court appointed Mr A. H. Smith, M.A., London, to act as substitute for the Additional Examiner in Classical Archæology during his absence for the ensuing examinations.

The Business and Law Committee reported that, having considered the question of the eligibility of women students for Prizes founded prior to 30th August 1864, they were of opinion that such Prizes do not fall under the Ordinance (No. 58) admitting women to Bursaries, &c. The Court approved. The Court approved of the report of the same Committee that the question as to the right of Patrons to present, either separately or conjointly with the University Court, women to Bursaries founded prior to 30th August 1864, seems to be determined against such right by Ordinance No. 58, Section ii., taken in connection with Ordinance No. 57, Sections xv. to xviii.

It was intimated that a bequest of £2000 by the late Mrs E. Crozier or Nichol, of 12 Findhorn Place, Edinburgh, had been made to the University to found an assistantship in connection with the Chair of Natural Philosophy.

The Court, after consultation with the Senatus, fixed Saturday, 7th November next, as the date for the ensuing Rectorial Election.

The Court approved of the arrangements made for conducting the Class of Mental Diseases during the absence of the Lecturer for part of next summer session.

It was agreed that the 5s. entrance fee shall be applicable to the Course on Private International Law, in accordance with Ordinance No. 50, ii.

Mr Franklin Peterson, Mus. Bac. (Oxon.), Edinburgh, was appointed Additional Examiner for the Bucher Scholarship in Music.

The recognition of Mr Alexander Johnstone, Edinburgh, as an extra-academical teacher in Botany was continued on change of teaching premises.

The draft regulations for the administration of the University Field submitted by the Field Committee were approved, subject to one or two slight alterations. The Court appointed the Hon. Lord Stormonth Darling and Professor Butcher to be Members of the University Field Committee as constituted under the regulations approved as above.

It was agreed that each of the two divisions of the Honours Course of fifty lectures on the English Language to be given by the University Lecturer during session 1896-7 may be taken separately, the fee for each of these half courses to be £2, 2s.

The reports submitted by the Finance and the Works Committee were approved.

Monday, 13th April 1896.—The Minutes of last meeting were submitted and approved.

Intimation having been made of a grant to the University of £20,000 out of the bequest left by the late Earl of Moray for the benefit of certain institutions, as a fund for the promotion of Original Research in the University of Edinburgh, to be called "The Earl of Moray's Endowment," the Court resolved to record their deep sense of the munificence of the gift, and their cordial approval of the purpose towards which it is to be applied.

Having considered the requirements for the Degrees of Bachelor of Medicine and Bachelor of Surgery under the new Ordinances, together with the report of the Faculty of Medicine as approved by the Senatus, and the report of a Committee of the Court thereon, the Court resolved as follows:—

"(*a*) Every Candidate for these Degrees shall be required to attend, in addition to present requirements:—

"1. A course of instruction in Mental Diseases, given by the University Lecturer or by a recognised teacher, consisting of not less than six class-room meetings for lectures and demonstrations, and ten meetings in the wards of a recognised asylum for the insane.

"2. *Post-mortem* examinations in a recognised hospital for a period of at least three months, during which practical instruction is given in the methods of making *post-mortem* examinations, and in framing reports.

"3. A course of clinical instruction in Infective Fevers, given at not less than twelve meetings in the wards of a recognised hospital where clinical instruction is given on cases of infectious diseases.

"4. Instruction in Diseases of the Eye, given by the University Lecturer or by a recognised teacher, at not less than twelve class-room meetings and twelve meetings for clinical instruction in the wards of a recognised hospital, or in the wards of a hospital, and in a dispensary both recognised for the purpose. The course to include efficient practical instruction in the methods of examining the eye.

"5. A course of Operative Surgery, conducted by the Professor of Surgery in the University, or by a recognised teacher.

"(*b*) Every Candidate shall also be required to attend any one of the two following courses :—

"1. Clinical instruction in Children's Diseases, given by the University Lecturers on this subject, or by a recognised teacher or teachers in a hospital recognised for the purpose, at not less than four lectures and ten meetings for clinical instruction in the wards, together with four meetings in the out-patient department of the hospital, with attendance at *post-mortem* examinations.

"2. Instruction in Diseases of the Larynx, Ear, and Nose, given by a University Lecturer, or by a recognised teacher, at not less than six class-room meetings, and twelve meetings for clinical instruction in the wards of a recognised hospital, or in the wards of a hospital and in a dispensary, both recognised for the purpose."

In connection with the above requirements, the Court resolved that no fee be charged for attendance on the *post-mortem* examinations and the clinical instruction in fevers; that the fee for Operative Surgery remain at £3, 3s., and for the course of instruction on Children's Diseases at £2, 2s.; and that the fee for instruction in Mental Diseases and Diseases of the Eye be £2, 2s. for each class.

Subject to an amendment, the suggestions of the Faculty of Medicine, approved by the Senatus, relative to the examinations in Clinical Medicine and Clinical Surgery for the Degrees of Doctor of Medicine and Master of Surgery were approved.

The fee for reappearance at examinations for the Degrees of D.Litt., D.Phil. and D.Sc. was fixed at £5, 5s.

The amendments suggested by the Draft Ordinances Committee on the Commissioners' Draft Ordinances (General No. 36—Regulations as to Resignation of Professors and Lecturers), and (General No. 37—Regulations as to Examinations, supplementary to Ordinances Nos. 13 and 43) were approved. No amendments were proposed on Draft Ordinances (General No. 38—Regulations as to Fees, supplementary to Ordinance No. 50), and (General No. 39—Regulations for the Degree of Bachelor of Divinity, supplementary to Ordinance No 63).

On a report by a Committee of the Court appointed to consider the question of mixed classes in connection with the medical education of women, it was agreed, when considering applications by Medical Schools or Teachers for recognition in respect of the medical education of women, to require that the classes shall not be mixed classes, except on special cause shown.

It was agreed to forward to the Universities Commissioners the following proposed amendment of the regulations for the preliminary examination in Science, with a view to its being given effect to in a supplementary Ordinance:—That Candidates for a Degree in Pure Science, Agriculture, or Public Health may, as an alternative for Mathematics on the higher standard, offer Mathematics on the lower standard as defined in the Ordinance for Degrees in Arts (No. 11), provided that, in addition to the ancient or modern language already taken, they offer, as a fifth subject, a modern language on the standard prescribed for the preliminary examination in Medicine (Ordinance No. 16).

The regulations for the Macpherson Scholarship recommended by the Senatus were adopted.

A letter was read from Miss E. A. Ormerod, F.E.S., Additional Examiner in Agricultural Entomology, offering, for the acceptance of the University, a collection of Economic Entomology, prepared by herself and her sister. The Court gladly accepted this valuable gift, and desired to record their thanks to the donors.

Appendix.

I. Civil Service of India Examinations.—The University of Edinburgh now being one of those Institutions selected by the Secretary of State for India, in which Candidates for the Civil Service of India may pass their probation, arrangements have been made by the Senatus for the accommodation of selected Candidates. Such selected Candidates will be under the supervision of the Principal and Deans' Committee.

Persons desirous to be admitted as Candidates may obtain all necessary information from "The Secretary, Civil Service Commission, London, S.W.," who will supply forms of application.

Candidates may be exempted from the Preliminary Examination in all subjects except geometrical drawing, if they can produce a Certificate of having passed the Preliminary Examination in general education required of Candidates for Graduation in Medicine at the University of Edinburgh, when the Candidate has passed in all the subjects of the Army Preliminary Examination at not more than two Examinations.

II. Examinations for Candidates for the Army.—In the Explanatory Memorandum of the Secretary for War, to accompany the Royal Warrant (of 30th October 1871) regulating first appointments, regimental promotion, &c., in the Army, it was announced that "A certain number of Sub-Lieutenancies a year will be allotted to Candidates who have passed the University Examination specified in the Regulations. If they also pass the Examination for the degree of B.A., they will be allowed two years' extension of the limit of age. University Candidates will be requiredto give at least six moaths' notice of their desire to be admitted into the Army. If in any year there should be more Candidates than appointments, the requisite number will be chosen by competition between the Candidates; after their appointment they will go through the same course as other Sub-Lieutenants."

In subsequent communications from the War Office it has been announced that "The Examination for M.A. at a Scottish University will be considered tantamount to passing that of B.A. at an English or Irish University;" and that "the Secretary of State for War has accepted an examination at the Scottish Universities, to be defined as 'The Examination for Candidates for the Army,' as equivalent to the examination at the English and Irish Universities for similar candidates, and that the age of such candidates may be extended to 21 years. This Examination will consist of one subject out of each of the three separate Departments marked (*a*) (*b*) (*c*) below."

In conformity with the above Regulations of the War Office—1st, All

who have passed the Examination for the degree of M.A. will be eligible for Commissions in the Army, and will be allowed two years' extension of the ordinary limit of age. 2nd, Those Students who have not passed the M.A. Examination may receive Certificates qualifying them for Commissions in the Army (provided they be not more than 21 years of age) on having attended one class in each of the three Departments (*a*) (*b*) (*c*)—that is to say (*a*) either one Greek or one Latin class; (*b*) either Logic, Moral Philosophy, or Rhetoric and English Literature; (*c*) either Mathematics or Natural Philosophy,—and on passing the M.A. Examination, in either April or October, in those three subjects in which the Candidate has attended classes.[1] Candidates for the Certificate are not required to pass the Preliminary Examination, but unless the Candidate has passed the Preliminary Examination, the Certificate will not qualify for Graduation in Arts.

The names of intending Candidates for Certificates must be given in and Fees paid at the *Matriculation Office* at the same time as those of Candidates for the M.A. Examinations.

The Fee for the Examination is two guineas.

III. Subjects of Examination for Students of Divinity and Candidates for License by Presbytery of Edinburgh.

Examination mainly in writing. An average of not less than 50 per cent. over all the subjects is necessary. Examinations held in the Examination Hall of the University.

1. *For Students entering the Divinity Hall.*—(1) Biblical Knowledge.—Genesis to 2 Samuel, and the Four Gospels; (2) The Shorter Catechism.

2. *For Students entering on their Second Year.*—(1) Latin.—Augustine—Enchiridion; (2) Greek.—The Epistle to the Colossians as in Lightfoot; (3) Hebrew.—Davidson's Grammar, 1-31; Genesis, i.-ix.; (4) Divinity.—Confession of Faith, 1-15; Flint's Theism; Row's Manual of Christian Evidences; (5) Biblical Knowledge.—1 Kings to Nehemiah, and Acts of the Apostles; (6) Church History.—History of the Church to 325 A.D.

3. *For Students entering on their Third Year.*—(1) Latin.—Anselm—Cur Deus Homo; (2) Greek.—St John's Gospel to be read critically, with discussions as to date and authorship; (3) Hebrew.—Davidson's Grammar, 32-49; Psalms i.-xv.; (4) Divinity.—Confession of Faith, 16-33; The Trinity; The Person of Christ; (5) Biblical Knowledge.—The Psalms and Isaiah; (6) Church History.—The Reformation Period, with special reference to Scotland.

4. *For Candidates for License.*—Scriptures of the Old and New Testaments, and History and Doctrine of the recognised Standards of the Church of Scotland.

J. Langwill, *Cl. Presb. Edin.*

[1] See Regulations for Degree of M.A.

N.B.—By Act of Assembly XX., 1889, all Students of Theology who have completed the prescribed course of Theological instruction shall, before applying to any Presbytery to be taken on trials for licence, be examined by the Synodical Committees already existing for examination of Students entering the Divinity Hall. The Convener of the Edinburgh Synodical Committee is the Rev. Dr Alison, who will give the necessary information.

IV. The Edinburgh University Union.—*President*—Dr J. G. C. Scott. *Hon. Secretary*—H. O. Hobson. *Treasurer*—W. A. Wood, C.A., 45 Queen Street. *Committee of Management.*—*Senatus*—Professors Butcher and Annandale. *General Council*—Dr J. Musgrove, Dr J. G. Cattanach, Dr Caird, Dr Aarons. *Students*—E. Bramwell, G. L. Chiene, C. Elmes, P. B. Wall, R. D. Melville, W. E. Gibbons.

The Union is open to all Students and Graduates of the University, and its purpose is "the provision and maintenance of means of social and academic intercourse for its members." The Building, which includes a large hall (in which the debates are held), luncheon, smoking, reading-rooms, and billiard-room, is situated in Park Street, near both the old and the new buildings. The reading-room is amply supplied with newspapers, and with the weekly, monthly, and quarterly periodicals; the billiard-room is furnished with two billiard tables, and the library contains University, Class, Text, and Reference Books.

Terms of Membership.—By payment of an entry-money of 5s. and an Annual Subscription of 10s. 6d. if a Matriculated Student, or £1, 1s. if a Graduate, University Assistant, or Lecturer.

Affiliated Societies.—The Edinburgh University Union Dramatic Society; University of Edinburgh Union Literary Society; E. U. Union English Public Schools Club.

The following University Societies and Associations, though not affiliated with the Union, have been granted certain privileges for the transaction of Business in the Union:—Students' Representative Council, Athletic Club, Conservative Association, Liberal Association, Chemical Society, Musical Society, and Darwinian Society.

Full particulars as to affiliation, &c., on application at the Union.

V. Statistics of the Rectorial Elections, 1859-1893.

1859.—*Gladstone*, 642.—*Neaves*, 527. Matriculated students, 1302.
1862.—*Gladstone* (*unopposed*). Matriculated students, 1331.
1865.—*Carlyle*, 657.—*Disraeli*, 310. Matriculated students, 1288.
1868.—*Moncreiff*, 607.—*Ruskin*, 425. Matriculated students, 1398.
1871.—*Maxwell*, 594.—*R. Palmer*, 502. Matriculated students, 1533.
1874.—*Derby*, 770.—*Playfair*, 583. Matriculated students, 1767.
1877.—*Hartington*, 932.—*Cross*, 684. Matriculated students, 2102.

1880.—*Rosebery*, 1024.—*Christison*, 985. Matriculated students, 2496.
1883.—*Northcote*—*Blackie*—*Trevelyan*. Matriculated students, 2660.
1886.—*Iddesleigh*, 1094.—*Playfair*, 747. Matriculated students, 2680.
1887.—*Lothian* (*unopposed*). Matriculated students, 2493.
1890.—*Goschen*, 1378.—*Russell*, 805. Matriculated students, 3038.
1893.—*Robertson*, 1145.—*Reay*, 728. Matriculated students, 2649.

VI. Royal Medical Society, Edinburgh, 7 Melbourne Place. Founded 1737. Royal Charter granted 1778. *Presidents*—J. E. Bowes, M.B., C.M.; W. Macrae Taylor, M.B., C.M.; Kenneth MacLean, M.B., C.M.; H. J. F. Simson, M.B., C.M. *Secretaries*—J. Brunton Blaikie; Scott Carmichael, M.B., C.M. *Treasurer*—J. R. Young, Esq. *Sub-Librarian*—A. P. Ormiston.

The Society meets in its hall every Friday evening during the Winter at 9 o'clock. At these meetings dissertations on medical subjects are read and debated, and communications by members on subjects of interest discussed. The Society possesses a very fine library, containing about 30,000 volumes, which is constantly being added to. There are comfortable writing and reading rooms with all the medical journals and periodicals, books of reference and text-books specially useful to students reading for examinations. The museum contains a complete collection of Materia Medica specimens, microscopic sections, pathological preparations, herbarium, and a surgical model, on which bandaging, setting of fractures, &c., may be practised.

VII. International-Academic Committee. The Principal and Deans' Committee of the Senatus and the International Academic Committee of the Students' Representative Council are prepared to give all the assistance and information in their power to Foreigners desirous of studying in the University of Edinburgh, and to Edinburgh University Students desirous of studying in foreign universities. Inquiries may be addressed in writing to the Secretary of Senatus, or to Dr J. G. Cattanach, 3 Alvanley Terrace, member of the International-Academic Committee.

VIII. Association for the Better Endowment of the University of Edinburgh. *President*—The Right Hon. Arthur James Balfour, D.C.L., LL.D., M.P., Chancellor of the University. *Vice-Presidents*—The Right Hon. The Earl of Wemyss, LL.D.; The Right Hon. The Earl of Stair, K.T.; The Right Hon. The Earl of Rosebery, K.G., K.T., LL.D.; Principal Sir William Muir, K.C.S.I., D.C.L., LL.D.

Ordinary Members of the General Committee—The Right Hon. John B. Balfour, Q.C., LL.D., M.P.; R. Fitzroy Bell, Esq., Advocate; A. W. Black, Esq.; John Boyd, Esq.; Sir Thomas J. Boyd; Professor Butcher, LL.D.; Rev. Professor Calderwood, LL.D.; John Carment, Esq., LL.D., S.S.C.; Professor Chiene, F.R.C.S.E.; D. Christison, Esq., M.D.; The Hon. Lord Rutherfurd Clark, LL.D.; Sir Thomas

Clark, Bart.; Archibald Constable, Esq.; Henry Cook, Esq., W.S.; Charles Cook, Esq., W.S.; R. Cameron Cowan, Esq., C.A.; Donald Crawford, Esq., Advocate; The Hon. Lord Stormonth-Darling, LL.D.; John Duncan, Esq., M.D.; J. R. Findlay, Esq.; The Rev. Archibald Fleming; John Harrison, Esq.; James Hope, Esq., W.S.; A. Taylor Innes, Esq., Advocate; The Hon. Lord Kinnear, LL.D.; Æ. J. G. Mackay, Esq., LL.D., Advocate, Sheriff of Fife; The Hon. Bouverie F. Primrose, C.B.; Charles Robertson, Esq., B.C.S.; Professor Seth, LL.D.; Robert Simson, Esq., B.C.S.; George Smith, Esq., LL.D., C.I.E.; James Walker, Esq. of Dalry. *Hon. Secretary*—Sir Alexander Christison, Bart., M.D. *Secretary*—Robert G. Scott, W.S., 61 North Castle Street.

Local Honorary Secretaries—A. Mercer Adam, Esq., M.D., Boston, Lincolnshire; Sir Dyce Duckworth, M.D., 11 Grafton Street, Piccadilly, London; Peter Gardner, Esq., W.S., 153 St Vincent Street, Glasgow; A. F. Hutchison, Esq., Stirling; James Tait, Esq., W.S., Kelso.

Terms of Membership—Life Subscription, Ten Guineas; Annual Subscription, One Guinea. Subscriptions and Donations in excess of these Sums are earnestly solicited by the Committee.

IX. University of Edinburgh Buildings Extension Scheme. At a Meeting of the Acting Committee for this Scheme, held on 16th November 1885, it was resolved to apply to Parliament for power to acquire houses in Park Street adjoining the present New Buildings as a site upon which to erect a University Hall; and under the Edinburgh University Buildings Extension Act, 1886, certain Members of the Committee were incorporated as Trustees by the name of the Edinburgh University Buildings Extension Trustees, for the purpose of acquiring the property in question and erecting the Hall.

The present Trustees are:—

Principal Sir W. Muir, K.C.S.I., D.C.L.
William M'Ewan, Esq., M.P.
Professor Sir William Turner, D.C.L.

Mr M'Ewan munificently offered to contribute the sum required to erect the Hall as originally contemplated, and in completion of the architect's design, upon condition of the cost of the site being provided otherwise. The Government was approached on the subject, and a Parliamentary grant of £8000 towards the cost of the site was obtained. Mr M'Ewan having provided the balance required, the site was purchased. Plans for the erection of the Hall by R. Rowand Anderson, LL.D., Architect, were approved of and contracts entered into, and the work is now approaching completion. By resolution of the Senatus Academicus, the new Hall will be named the "M'Ewan Hall," in grateful recognition of the founder's benefaction.

George Somerville, City Chambers,
Clerk to Trustees.

X. UNIVERSITY SOCIETIES AND CLUBS.

i.—The Agricultural Society. Established 1858. *Honorary President*—Professor Wallace. *President*—A. Allsebrooke. *Vice-President*—F. P. Walker. *Secretary*—A. Fraser. *Treasurer*—W. Bruce. *Committee*—Messrs Naismith, Rushton, and Mason.

This Society meets weekly on Wednesdays during the Winter Session at 8 P.M.

ii.—Arts Students' Christian Association. *Hon. President*—Rev. George Wilson. *Hon. Vice-Presidents*—Professor Butcher, LL.D.; Professor Calderwood, LL.D.; Professor M. Dods, D.D.; Rev. Alex. Martin, M.A.; Rev. James Durran, M.A.; Dr A. H. F. Barbour, M.A.; Rev. A. Whyte, D.D. *President*—Harry C. Duncan. *Secretary*—G. Henry Donald, 7 Thirlestane Road. *Assistant-Secretary*—J. B. West. *Treasurer*—S. A. K. Wilson.

The objects of the Association are—(1) To form a bond of union between men whose principle and aim in life is Christian; (2) To promote social intercourse; (3) To give University men an opportunity of engaging in Christian work; (4) To foster study of the Bible.

(Women's Branch).

Honorary President—Miss Louisa Stevenson. *President*—Miss Nairn, M.A. *Vice-Presidents*—Miss Dods and Miss Graham. *Secretary*—Miss Lorimer, 9 Gloucester Place. *Treasurer*—Miss Sutherland, 30 Warriston Crescent. *Committee*—Misses C. B. Macdonald, B. Robson, H. Macfie, C. Tweedie, A. Macdonald, E. M. Milligan, in addition to the office bearers *ex-officio*.

The work is carried on by means of a weekly meeting for Bible study and other religious and social meetings. Membership is open to all Matriculated women students, present and past, of the University of Edinburgh, the annual subscription being one shilling.

iii.—Associated Societies of the University. This Association was instituted in 1833, and is a Union of Literary and Debating Societies. It is composed at the present date of five societies: The Dialectic, Scots Law, Diagnostic, Philomathic, and Celtic Societies. The following is the list of the Office-Bearers of the Association, and of the respective component societies:—

Honorary President—Professor David Masson, LL.D. *Hon. Vice-Presidents*—The Senatus Academicus of the University (*ex officiis*). *Secretary*—John A. Robson, M.A., 87 Gilmore Place.

(1.) Dialectic Society. Instituted in 1787. *Presidents*—Alex. M. MacEwen; J. M. Macmillan, M.A.; J. Smart, M.A.; W. Porter; W. A. Curtis. *Secretary*—R. C. Henderson, M.A. *Treasurer*—D. W. Watson.

This Society meets in the Societies' Hall every Thursday Evening at 8 o'clock, for the prosecution of Literary and Philosophical Composition, Criticism, and Debate.

(2.) Scots Law Society. Instituted in 1815. *Presidents*—A. N. Stephenson, Solicitor; J. Erskine Dods, M.A., LL.B.; George Morton, M.A., LL.B., Advocate. *Secretary*—Douglas M. Gibson, 84 Great King Street. *Assistant-Secretary*—Charles R. Beveridge, Solicitor, 57 Marchmont Road. *Treasurer and Librarian*—James D. Millar, M.A., 26 York Place.

This Society meets every Monday evening during the Winter Session, at 8.30 o'clock, for the purpose of debating Legal Questions and reading Essays.

(3.) The Diagnostic Society. Instituted in 1816. (*Office-Bearers not communicated.*)

This Society meets every Tuesday evening during the Winter Session, at 9 o'clock, in the Associated Societies' Hall, for the purpose of debating and reading Essays.

(4.) Philomathic Society. Instituted in 1858. *Presidents*—Robert Y. Whitton, Thomas Maclagan, James S. Macdonald. *Secretary*—J. R. Hunter. *Assistant-Secretary*—Campbell Irons. *Treasurer*—John Walker, M.A. *Committee*—The Office-Bearers, and Messrs Donald, Henry, and Norman. *Delegates to Associated Societies' Council*—Mr R. Y. Whitton, and the Secretary.

This Society meets in the Societies' Hall every Friday evening during the Winter Session, at 8 P.M., for the purposes of debate and essay-reading; and is open to all who are, or have been, Matriculated Students of the University of Edinburgh.

(5.) Celtic Society. Instituted 1848. *Honorary President*—Professor Mackinnon. *Presidents*—T. S. Macpherson, R. Macleod, and E. Fraser. *Secretary*—Mr D. T. Mackintosh. *Assistant-Secretary*—Mr J. M. Lamont. *Treasurer*—Mr J. M. M'Millan, M.A. *Additional Members of Committee*—Messrs J. Cameron and C. Urquhart. *Representative to S.R.C.*—Mr Don. Lamont.

The Society meets every Saturday evening during the Winter Session, at 7 o'clock P.M., in the Associated Societies' Hall. All Celtic Students cordially invited. Next Session begins on Friday, 23rd October.

iv.—Athletic Club. *President*—J. G. C. Scott. *Vice-President*—S. J. Aarons. *Treasurer*—C. E. W. Macpherson. *Hon. Secretary*—C. MacLaurin, the University Union, Park Place.

Open to all Members and Graduates of the University, and to Students of the Extra-Mural School. The *sections* of the Club are—

1. Football (Rugby)—*Secretary*—A. Wood. (Association)—*Secretary*—N. MacGowan. 2. Cricket—*Secretary*—H. Malins. 3. Cycling—*Secretary*—A. D. Grange. 4. Lawn Tennis—*Secretary*— 5. Swimming—*Secretary*— 6. Hare and Hounds—*Secretary*—J. Edwards. 7. Golf (affiliated)—*Secretary*—R. J. Bryce. 8. Rowing—*Secretary*—W. G. Currie.

Field at Craiglockhart. Address all communications to *Sec.*, University Union.

v.—Caithness Students' Association. Instituted in 1856. *Honorary President*—His Grace the Duke of Portland. *President*—Walter Murray. *Secretary*—D. B. Waters, M.A. *Treasurer*—George Wares. *Joint Competition Committee*—J. Gregory Nicolson, J. B. Meiklejohn, and John A. Waters. *Representative to S.R.C.*—T. W. Stewart.

This Association meets fortnightly, in the Education Class Room, on Saturdays, at 8 P.M., during the Winter Session, for the purpose of debating, for reading Essays, and for the advancement of education in Caithness.

vi.—Chemical Society. Instituted 1874. *President*—Professor A. Crum Brown, M.D., D.Sc. *Vice-Presidents*—A. P. Aitken, D.Sc.; J. E. Mackenzie, Ph.D., B.Sc. *Librarian*—
Secretary—R. Fairbairn, B.Sc. *Treasurer*—Longfield Smith.

This Society holds fortnightly meetings, at 8 P.M., in the Committee Room of University Union, during the Winter Session, for the reading and discussion of papers on Chemistry and allied Sciences.

Excursions to Chemical Works, &c., during the Sessions.

vii.—Dumfriesshire and Galloway Literary Society. Instituted 1847. *Presidents*—William Murray, 107 Marchmont Road; J. E. Gibson, 1 Roseneath Terrace; J. W. Barbour, 15 Spottiswoode Street; Joseph Jardine, 16 Marchmont Road. *Secretaries*—Jas. Conchie, 55 Marchmont Road; John M'Murray, 8 Blackwood Crescent. *Treasurer*—James Armstrong, 23 Livingstone Place.

The Society meets every Saturday evening during the Winter Session, at 7 o'clock, in the Public Law Class-Room.

viii.—Free Church Society. Instituted 1886. *Honorary President*—C. J. Guthrie, Esq. *Senior President*—G. L. Sturrock. *Junior President*—A. S. Crichton. *Secretary*—J. A. Davidson. *Assistant Secretary*—J. W. Payne. *Treasurer*—D. D. Paton.

This Society meets every Saturday evening during the Winter Session, at 7 o'clock, in the F.C. College, Mound, for the purpose of debating and reading Essays.

ix.—Medical Students' Christian Association. *Honorary President*—Professor Sir Thomas Grainger Stewart, M.D. *Honorary Vice-Presidents*—Professors Crum Brown, M.D.; Greenfield, M.D.; Sir D. Maclagan, M.D.; A. R. Simpson, M.D.; Dr J. Affleck; Dr J. W. Ballantyne; Dr A. H. F. Barbour; Dr Robert Fleming; Mr A. G. Miller, F.R.C.S.E.; Mr C. W. Cathcart, F.R.C.S.; Mr J. Shaw M'Laren, F.R.C.S.E.; Dr J. C. Webster. *President*—B. L. Livingstone-Learmonth, 88 Polwarth Gardens. *General Secretaries*—William A. Murray, 6 Warrender Park Crescent; T. C. Mackenzie, 36 Wood-

burn Terrace. *Ward Secretaries*—H. T. Holland, and J. C. Carr, 1 Roseneath Place. *Treasurer*—Harold Nuttall (c/o Mackintosh), 75 Warrender Park Road.

The object of the Association is, stated briefly, to form a bond of union between Medical Students whose *principles and aims in life* are Christian. Membership is open to both University and College of Surgeons Students. A half-hour meeting, to which *all* Medical Students are invited, is held each Sunday during Session from 10 to 10.30 A.M. in the Chapel of Royal Infirmary, and is conducted by various medical men and Senior Students. There is a Missionary Library open to all matriculated Students. The Secretaries will be glad to give full information as to the work of the Society, and to enrol any who wish to become members.

x.—Missionary Association. Instituted 1825.—*Honorary President*—Principal Sir W. Muir, K.C.S.I., D.C.L. *Hon. Vice-Presidents*—The Lord Rector, Right Hon. J. P. B. Robertson; Rev. Professor Calderwood; Very Rev. Professor Charteris; Rev. Professor Kennedy. *Chairman of Workers' Meeting*—Rev. Professor Kennedy. *President*—Walter R. Henderson, M.A. *Vice-President*—Andrew Mutch, M.A. *Secretary*—Jas. Wallace, M.A. *Assistant Secretary*—A. C. Buchanan, B.A. *Treasurer*—W. Melville Sym, Esq., C.A. *Assistant Treasurer*—W. G. M'Kean. *Librarian*—Murray Corson, M.A. *Vice-Librarian*—W. S. Simpson, M.A.

The Association meets to transact business in the Public Law Class-Room on alternate Saturdays, at 10 A.M.

xi.—Musical Society. Established 1867.—*Patron*—H.R.H. The Reigning Duke of Saxe-Coburg and Gotha (The Duke of Edinburgh). *President*—Professor Niecks. *Vice-Presidents*—Principal Sir W. Muir, K.C.S.I.; Professors Annandale, Armstrong, Butcher, Calderwood, Crum Brown, Flint, Kirkpatrick, Maclagan, Rutherford, Seth, Emeritus-Professor Sir Herbert S. Oakeley; D. Hepburn, M.D.; and Macdonald Brown, M.B. *Hon. or Corresponding Vice-Presidents*—The President of Aberdeen University Musical Society and Professor Prout, Dublin; Professor Sir John Stainer, Oxford; Professor Villiers Stamford, Cambridge. *Hon. Secretary*—Leonard Crossley. *Treasurer*—W. C. Sillar, M.B. *Conductor*—Mr Carl D. Hamilton.

Weekly practice, during the Winter Session, in the Hall of the University Union. Day and hour subject to arrangement at the general meeting held at the beginning of the Winter Session.

xii.—Physical Society.—*Presidents*—L. O. Critchley; A. D. Russell. *Secretary and Treasurer*—D. Macrae Aitken, Physical Laboratory. This Society meets every third Wednesday during the Session, at 7.30 P.M., for the discussion of subjects connected with Mathematical and Experimental Physics.

xiii.—Photographic Society.—*Honorary President*—Professor

Crum Brown. *President*—Dr T. W. Drinkwater. *Vice-Presidents*—Dr Logan Turner, Prof. Cossar Ewart, Dr Cathcart. *Hon. Secretaries*—H. O. Hobson, W. P. Craig, The Union. *Hon. Treasurer*—H. O. Hobson. All past and present Students eligible. Dark-rooms, Studio, &c., at 3 Bristo Place, free to Members at any time. Monthly meetings during sessions. Excursions in summer time.

xiv.—Rifle Company Shooting Club. Instituted 1873.—*Honorary President* — Lieut.-Col. Sir Wm. Turner. *President*—Captain I. B. Balfour. *Vice-Presidents* – Lieutenants J. A. Hope and E. H. Robertson. *Secretary and Treasurer*—Sergeant Gavin Grey. *Committee* – Col.-Sergeant G. R. Livingston; Sergeant J. B. Jamieson; Sergeant A. N. Bond; Lance-Corporal J. A. Thompson, and Private R. M. Skinner. This Club is open to members of No. 4 (University) Co., Q.R.V.B., R.S. The Club superintends the shooting of the Company. Weekly competitions are held at Hunter's Bog, and an Annual Prize Competition in July, at which numerous prizes are given. A silver teaspoon is given for each weekly competition.

xv.—Scottish Inter-University Rifle Match.—*Edinburgh Committee*—Lieutenant J. A. Hope; Sergeant C. W. Peach; Corporal J. A. Benson, Q.R.V.B.; Sergeant C. J. Caddick; Corporal J. Hunter, E.C.V.A.; Sergeant G. M. Pratt; Private J. R. Robinson, V.M.S.C. *Hon. Secretary* – Sergeant Gavin Grey, Q.R.V.B., 37 Gilmore Place. The Inter-University Challenge Trophy is shot for annually by the four Scottish Universities. Each University sends a team of ten men, of whom at least five must be matriculated students at the date of the match, and the remainder must have attended a class in the University for at least one Session. Students willing to shoot are requested to communicate with the Secretary.

xvi.—Shinty Club.—*Patrons*—Lord Robertson, Lord Rector of the University; Lord Reay; Sir Lewis M'Iver, M.P.; Count de Serra Largo; Dr M'Gregor; Rev. Dr Blair, of St John's, Edinburgh; Major Mundell, Lochbroom; Dr A. Macdonald, Edinburgh; Dr Carment; Sheriff Mackay; A. MacHardy, Esq., Inverness; Surgeon-Major MacGregor, Edinburgh. *President*—Professor Struthers. *Vice-President*—Professor M'Kinnon. *Captain*—M. N. Macinnes, M.A. *Vice-Captain*—G. J. Meikle. *Hon. Secretary and Treasurer*—W. Machardy, 38 Warrender Park Terrace. Membership is open to all past and present Students of the University. Practice at Inverleith Park on Saturday afternoons during Winter Session.

xvii.—Theological Society. Instituted 1776. — *Honorary President*—Rev. Professor Flint, LL.D. *Honorary Vice-Presidents*—Rev. Professor Charteris, D.D.; Rev. Professor Taylor, D.D.; Rev. Professor Kennedy, D.D. *Presidents*—W. W. Reid, M.A.; Robert G. Jamieson, M.A.; James Wallace, M.A.; David Duncan. *Secretary*—A. W. Mitchell, M.A. *Treasurer*—W. Walker, M.A.

This Society is open to present and past Students of any Theological Seminary. It meets every Friday evening during the Winter Session, at 8.30 P.M., for debates and discussions on questions of Theology, Church History, Biblical Criticism, General Ecclesiastical Polity, and kindred subjects.

XVIII.—TOTAL ABSTINENCE SOCIETY. INSTITUTED 1853.—*Honorary President*—Rev. Professor Charteris. *Honorary Vice-Presidents*—Rev. Professor Calderwood; Professor Simpson; Charles J. Guthrie, M.A.; J. Shaw Maclaren, F.R.C.S.E.; A. G. Miller, F.R.C.S.E.; R. L. Orr, LL.B. *President*—Harold Nuttall, M.A. *Vice-President*—Miss J. A. Robertson. *Secretary*—A. Graham Donald, 15 Buccleuch Place. *Special Secretary for Speakers*—G. M. Macdougall, 3 Moncrieff Terrace. *Treasurer*—Sidney G. Campbell, Catherine Lodge, Newhaven Road.

The condition of membership is total abstinence for the current academic year, "ab Octobre ad Octobrem." The Secretary requests all who are abstainers to send in their names, that the roll of such may be as complete as possible.

XIX.—UNIVERSITY BATTERY, E.C.V. ARTILLERY.—*Captain*—Professor J. C. Ewart. *Lieutenant*—I. Coates. *Sergeant-Major*—H. O. Hobson. *Sergeants*—C. J. Caddick, C. J. Lauchlan, W. Hamilton-J. A. Raeburn. *Hon. Secretary and Treasurer*—Sergeant Hamilton, 21 Brougham Street.

The Battery is recruited from the University and the Extra-mural School only. During the summer numerous competitions are held: in the Battery, Carbine Shooting and a competition in drill with field-guns by subdivisions for the Challenge Shield; in the Brigade, Carbine Shooting, Field-gun Shooting, and Repository Competitions; and, inter-regimentally, numerous prizes are offered by the Scottish National Artillery Association at Barry Camp for Shooting, Drill and Repository work with field-guns, including the Waveney Cup.

Further information may be obtained from any of the above-named N.C.O's, or at Headquarters, 31 St James' Square.

XX.—UNIVERSITY HALL AND ST GILES' HOUSE, RIDDLE'S COURT (5 Victoria Terrace) and RAMSAY LODGE. FOUNDED MAY 1887.—University Hall is designed as a social residence for Students, Graduates, and others connected with the University. Begun in 1887 at Mound Place, it has since been extended to Riddle's Court, to Ramsay Garden and Ramsay Lodge, and now to St Giles' House, 22 St Giles' Street. These buildings are within short distances of the University, and include common rooms, private studies, and bedrooms. The rents range from 8s. to 18s. per week, and the board from 12s. to 14s. per week, payable by term or week.

The external affairs of the Hall are in the hands of Professor Geddes, with the assistance of the following Consulting Committee:—Lord

Stormonth-Darling; Professors Butcher, Chiene, Kirkpatrick, Crum Brown, Geddes; Æneas Mackay, Esq., LL.D.; R. Fitzroy Bell, Esq.; W. K. Dickson, Esq.; Dr George Mackay: Dr Hunter Stewart: James Macdonald, Esq., S.S.C.; R. C. Gray, Esq., S.S.C.; J. F. Mackay, Esq., W.S.; Dr Caird; J. Arthur Thomson, Esq., M.A.; and three representatives from those in residence. Messrs Whitson & Methuen, C.A., 26 Hill Street, are Secretaries of this Committee.

The internal arrangements of each house are, in most cases, managed by a committee of the residents elected monthly. When desired, young Students can be placed under the care of one of the resident tutors, the Rev. H. H. Flower, Pittodrie House, Ramsay Gardens; J. A. Thomson, Esq., M.A.; and others, and in some of the chambers and larger houses occupied by teachers, graduates, &c., Students can be received as pupils and boarders.

Application for rooms should be made at the different houses. Application for information with regard to general questions on University Hall can be made to Messrs Whitson & Methuen, C.A., 26 Hill Street, Edinburgh.

xxi.—Crudelius Residences for Women Students, No. 6 Archibald Place, and Burns's Land, 457 Lawnmarket, Edinburgh. Instituted 1894.—*Executive Committee*—Professor Kirkpatrick (Chairman), Mrs Baldwin Brown, Mrs G. Wardlaw Burnet, Miss M'Lean, Principal Grant Ogilvie, Two Representatives elected by the Residents, and the Hon. Secretary, *ex officio*. The rents vary from 6s. 6d. to 16s. per week, including the use of common sitting-rooms, light, service, &c.; and the cost of board is about 8s. per week.

For particulars apply to the Hon. Secretary, Mrs Salmon, 8 Ramsay Garden, Edinburgh.

xxii.—University U.P. Students' Society. Instituted 1843. —*Honorary Presidents*—Professor Crum Brown, M.D., LL.D.; Rev. Professor Henry Calderwood, LL.D.; Rev. John Hutchison, D.D.; Rev. A. B. Cameron, D.D. *President*—R. Whyte, M.A. *Vice-Presidents*—A. Alexander, M.A.; R. Gray, M.A. *Secretary*—John Adam Gray. *Treasurer*—T. Fraser.

The Society meets every Saturday evening during the Winter Session, in the College Buildings, Castle Terrace, at Seven o'clock.

xxiii.—Women's Debating Society. Instituted 1893.—Office-bearers for 1895-96:—*President*—Lilias A. Johnstone. *Vice-Presidents*—Mary C. Dods, Helen Macfie. *Secretary*—Alice A. Nicol. *Treasurer*—Elizabeth Pagan. Office-bearers for 1896-97:—*President*—Helen Macfie. *Vice-Presidents*—Mary C. Dods, Alice A. Nicol. *Secretary*—Edith Hooper, The University. *Treasurer*—Elizabeth Pagan.

The Society meets every Friday during the Winter Session, at 5 P.M., within the University, for Debate and Literary Criticism.

SUPPLEMENTARY REGULATIONS FOR PRELIMINARY EXAMINATION, &c., WHICH HAVE NOW COME INTO FORCE.

I. Section III., Sub-section 1, of Regulations shall be read and construed as if after the word "Italian" there were inserted the words, "or such other language as the Senatus Academicus may approve."

II. Section XII. shall be read and construed as if at the end of the section there were added as a new sub-section the words :—"(4) Every candidate shall have obtained a certificate of his attendance on the class of Latin or Greek, under sub-sections (1) or (2) of this section, before he offers himself for examination in his Honours group of subjects."

III. Candidates for Honours in Mental Philosophy who have included Latin, but not Greek, as one of the subjects in which the standard of examination is the same as that required for the ordinary degree of Master of Arts, shall be deemed to have satisfied the provisions of Section XII., Sub-section (2) of the Regulations, if, before they offer themselves for the Honours Examination in Mental Philosophy, they shall have passed a special examination in translating into English passages from the works of Greek philosophical authors, including passages from the works of such authors not previously prescribed.

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